

EXHIBIT G

**UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

OLLNOVA TECHNOLOGIES LTD.,

Plaintiff,

v.

ECOBEE TECHNOLOGIES, ULC d/b/a
ECOBEE,

Defendant.

Case No. 2:22-cv-00072-JRG

JURY TRIAL DEMANDED

PROPOSED JURY INSTRUCTIONS^{1,2}

¹ Submissions that are agreed to by both Ollnova and ecobee are not highlighted.

Submissions proposed by Ollnova that are not agreed to by ecobee are bracketed and highlighted in green. Submissions proposed by ecobee that are not agreed to by Ollnova are bracketed and highlighted in yellow. The parties have entered their objections, explanations, citations, and commentary in footnotes only.

² The parties' negotiations concerning the jury instructions herein are ongoing, and the parties reserve the right to identify additional supporting citations and argument, including in response to the opposing party's arguments herein, prior to trial.

JURY CHARGE

PRELIMINARY INSTRUCTIONS³

1. DUTY OF THE JURY

Ladies and Gentlemen, you have been sworn as the jurors in this case, and as the jury, you are the sole judges of the facts and as such, you will decide and determine what all the facts are in this case. As the judge, I will give you instructions on the law. I will decide questions of law that arise during the trial. I am responsible for managing the flow of the trial and maintaining the decorum of the courtroom.

At the end of the evidence, I will give you detailed instructions about the law to apply in deciding this case and I will give you a list of questions that you are then to answer. As I told you, this list of questions is called the “verdict form.” Your answer to those questions will need to be unanimous and those unanimous answers will constitute the verdict in this case.

2. PATENT LAW OVERVIEW

Now, I want to briefly tell you what this case is about. As you know, it involves a dispute regarding certain United States patents. I know that each of you saw the video this morning produced by the Federal Judicial Center, but I need to give you some instructions now and on the record about a patent and how one is obtained.

Patents are granted or denied by the United States Patent and Trademark Office, often referred to, for short, simply as the PTO. A valid United States patent gives the patent holder the right for up to 20 years from the date the patent application is filed, to [seek money damages from]⁴

³ *Optis Wireless Tech., LLC v. Apple Inc.*, 2:19-cv-0066-JRG, Trial Tr. at 174-205 (Preliminary Jury Instructions) (E.D. Tex. Aug. 3, 2020).

⁴ 35 U.S.C. § 284

[exclude]⁵ others from making, using, offering to sell, or selling the patented invention within the United States or from importing it into the United States without the patent holder's permission.

[A patent is a form of property called "intellectual property." And like other forms of property, a patent can be bought or sold.] A violation of a patent holder's rights is called "infringement." A patent holder may enforce a patent against persons it believes to be infringers by filing a lawsuit in federal court, and that is what we have in the case before us.

The process of obtaining a patent is called "patent prosecution." To obtain a patent, one must first file an application with the United States Patent and Trademark Office. The PTO is an agency of the United States Government that employs trained examiners who review patents or patent applications. The application includes what is called a "specification." The specification within a patent application contains a written description telling what the [claimed] invention is, how it works, how to make it, and how to use it. The specification concludes, or ends, with one or more numbered sentences. These numbered sentences are called "patent claims."

When a patent is granted by the PTO, it is the claims that define the boundaries of its protection and give notice to the public of those boundaries. Patent claims may exist in two forms referred to as independent claims and dependent claims. An independent claim does not refer to any other claim in the patent. It is independent, and sets forth all of the requirements that must be met in order to be covered by that claim. It is not necessary to look at any other claim to determine what an independent claim covers. However, a dependent claim refers to at least one other claim in the patent. A dependent claim includes each limitation or element of the other claim or claims to which it refers, or as we sometimes say, from which it depends, as well as the additional elements or limitations recited within the dependent claim itself. Therefore, to determine what a

⁵ [35 U.S.C. § 154.]

dependent claim covers, it is necessary to look at both the dependent claim itself and the independent claim or claims from which it refers or from which it depends.

The claims of the patents-in-suit use the word “comprising.” Comprising means including or containing. A claim that includes the word “comprising” is not limited to the methods or devices having only the elements that are recited in the claim, but also covers other methods or devices that add additional elements. Let me give you an example. If you take, for example, a claim that covers a table, the claim recites a table comprising a tabletop, four legs, and glue. That claim will cover any table that contains a tabletop, four legs, and glue even if it contains other structures such as wheels that go on the end of the legs or leaves that go in the tabletop. [However, if a product is missing even one limitation or element of a patent claim, then that product is not covered by the claim and does not infringe. For example, a claim that recites “a table comprises a tabletop, legs, and glue” would not cover a table that includes a tabletop and legs, but no glue.]⁶ Now, that’s a simple example using the word comprising and what it means. In other words, it can have other features in addition to those that are covered by the patent.

Now, after an applicant files an application with the PTO, an examiner is assigned by the PTO and that examiner reviews the application to determine whether or not the claims are patentable. That is to say, whether or not the claims are appropriate for patent protection and whether or not the specification adequately describes the invention that is claimed. In examining a patent application, the examiner reviews certain information about the state of the technology at the time the application was filed. The PTO searches for and reviews this type of information that is publicly available or that was submitted with the application. This type of information is called prior art.

⁶ *EcoFactor Inc. v. ecobee Inc.*, No. 6:21-cv-00428-ADA, Dkt. 241 at 20 (W.D. Tex.).

The examiner reviews this prior art to determine whether or not the invention is truly an advance over the state of the art at the time. Prior art is defined by law and at a later time I will give you specific instructions as to what constitutes prior art. However, in general, prior art includes information that demonstrates the state of the technology that existed before the claimed invention was made or before the application for the patent was filed. Now, a patent contains a list of certain prior art that the examiner has considered. The items on this list of prior art, which the examiner has considered, are called cited references.

Now, after the prior art search and an examination of the application, the PTO examiner informs the applicant in writing of what the examiner has found and whether the examiner considers any claim to be patentable, and thus, it would be allowed. This writing from the examiner to the applicant is called an Office Action. Now, if the examiner rejects the claims, the applicant has an opportunity to respond to the examiner to try and persuade the examiner to allow the claims. The applicant also has the chance to change or amend the claims or to submit new claims and the papers generated during these communications back and forth between the applicant and the examiner are called the prosecution history.

This prosecution history process may go back and forth between the applicant and the examiner for some time until the examiner is ultimately satisfied that the application meets the requirements for a patent. In that case, the patent issues as a United States patent, or in the alternative, if the examiner ultimately concludes that the application should be rejected, then no patent is issued. Sometimes patents are issued after appeals within the Patent and Trademark Office or to a court.

The fact that the PTO grants a patent does not necessarily mean that the invention claimed in the patent, in fact, deserves the protection of a patent.⁷ [For example, the PTO may not have had available to it all other prior art that will be presented to you. In addition, there is the possibility that mistakes were made or that information was overlooked. Examiners have a lot of work to do and no process is perfect. Also, unlike a court proceeding, patent prosecution takes place without input from those who are later alleged to infringe the patent.]^{8,9} Now, while an issued United States patent is presumed to be valid under the law, a person accused of infringement has the right to argue in federal court that a claimed invention in a patent is invalid.

It is your job as the jury to consider the evidence presented by the parties and to determine independently and for yourselves whether or not the Defendant has proven that a patent is invalid.

3. CASE OVERVIEW

Now to help you follow the evidence, I will give you a brief summary of the positions of the two parties. The party that brings or initiates a lawsuit is called the Plaintiff. The Plaintiff in this case is Ollnova Technologies Ltd., which you will hear referred to throughout the trial as Ollnova or simply as the Plaintiff. The party against whom a lawsuit is filed is called the Defendant. The Defendant in this case is ecobee Technologies, ULC d/b/a ecobee, which you will hear referred to simply as ecobee or Defendant.

⁷ *Optis Wireless Tech., LLC v. Apple Inc.*, 2:19-cv-0066-JRG, Trial Tr. at 180 (Preliminary Jury Instructions) (E.D. Tex. Aug. 3, 2020).

⁸ The Federal Circuit Bar Association Model Patent Jury Instructions (May 2020) § A.1; *Int'l Bus. Mach. Corp. v. Groupon, Inc.*, No. 16-122-LPS, Dkt. 314 at 1-2 (D. Del. June 15, 2018); *EcoFactor, Inc. v. Google LLC*, No. 6:20-cv-00075, Dkt. 209 at 24 (W.D. Tex. Feb. 10, 2022).

⁹ **Ollnova's Objection:** This language improperly suggests to the jury that the PTO makes "mistakes" and "overlooks" information during the patent prosecution process.

ecobee's Response: This language is consistent with the Federal Circuit Bar Association Model Patent Jury Instructions and the Court's MIL No. 10.

Now, as I mentioned to you during jury selection earlier today, this is a case of alleged patent infringement. And as I may have already mentioned, there are four separate United States patents that have been asserted by Ollnova in this case against ecobee.

The first patent is U.S. Patent No. 7,746,887. As you may know, patents are commonly referred to by the last three digits of the patent number. So this particular patent will be referred to as the '887 or '887 patent.

The second U.S. patent at issue in this case is U.S. Patent No. 7,860,495, referred to as the '495 or the '495 patent.

The third U.S. patent at issue in this case is U.S. Patent No. 8,224,282, referred to as the '282 or the '282 patent.

The fourth U.S. patent at issue in this case is U.S. Patent No. 8,264,371, referred to as the '371 or the '371 patent.

Now, these four patents collectively, you will hear referred to at various times throughout the trial as the patents-in-suit. You may also hear them referred to collectively as the asserted patents. Both of these things mean the same thing – that is, the four patents I have just identified for you.

The Plaintiff, Ollnova, contends that the Defendant, ecobee, is infringing certain claims of the patents-in-suit by making, using, importing, selling, or offering to sell in the United States certain ecobee thermostats and remote sensors that include their patented technology. Ollnova also contends that ecobee has induced and continues to induce infringement by others. Ollnova further contends that ecobee has contributorily infringed the patents-in-suit. As a result, Ollnova contends that it is entitled to money damages as a result of that infringement.

The Defendant, ecobee, denies that it is infringing any of Ollnova's patents-in-suit and ecobee contends that the asserted claims of the patents-in-suit are invalid as either being anticipated or obvious in [light of prior art.]¹⁰ [view of other patents and publications that existed at the time the patents-in-suit were filed.]¹¹ Separately, ecobee also contends the elements of asserted claims of the '495 Patent, both individually and as an ordered combination, are invalid because they involve no more than well-understood, routine, and conventional activities understood by a person of skill in the art as of August 9, 2004.

The products that are alleged to infringe the patents-in-suit are smart thermostat devices called the ecobee Smart Si Thermostat, ecobee3, ecobee3 lite, ecobee4, ecobee SmartThermostat with Voice Control, ecobee Smart Thermostat Enhanced, ecobee Smart Thermostat Premium, and remote sensor devices called ecobee SmartSensor devices. These may be collectively called the "Accused Products." To be clear, Ollnova has not alleged that every one of these Accused Products infringes every patent-in-suit. The particular Accused Products at issue for each patent-in-suit will be explained during the trial.

Now, I know that there are a lot of new words and concepts that have been thrown at you since you arrived for jury duty this morning. I am going to define a lot of those words and concepts for you as we go through these instructions.

The attorneys are going to discuss them in their opening statements. The witnesses are going to help you by going through their testimony to help understand these words and concepts.

¹⁰ *Optis Wireless Tech., LLC v. Apple Inc.*, 2:19-cv-00666-JRG, Trial Tr. at 183 (Preliminary Jury Instructions) (E.D. Tex. Aug. 3, 2020).

¹¹ **Ollnova's Objection:** The concept of "prior art" was already introduced to the jury. ecobee's proposed language suggests that the patents-in-suit may be invalid in light of "other patents and publications that existed at the time the patents-in-suit were filed" irrespective of whether such "patents and patent applications" qualify as prior art.

So please, do not feel overwhelmed at this stage. I promise you, it will all come together as we go through the trial.

4. DUTIES

One of your jobs in this case is to decide whether or not the asserted claims of the four patents-in-suit have been infringed and whether they are invalid. If you find that [any] asserted claim [has been] infringed [by the Defendant] and [is] not invalid, you will also then need to decide what amount of money damages should be awarded to the Plaintiff as compensation for that infringement.¹²

My job in this case is to tell you what the law is, handle the rulings on evidence and procedure, and to oversee the conduct of the trial. In determining the law, it is specifically my job to determine the meaning of any claim language from within the patents-in-suit that needs interpretation. I have already determined the meanings the claims of the patents-in-suit, and you must accept those meanings, which the lawyers sometimes call “constructions” that I give you. You must use those meanings when you decide whether any particular claim has or has not been infringed and whether any claim is or is not invalid. You will be given a document in a moment that reflects these meanings and interpretations that I have already reached. For any claim term for which I have not provided you with a specific definition or a construction, you should apply the plain and ordinary meaning of the term. If, however, I provided you with a specific definition or a construction, you are to apply my definition to those terms throughout the case. However, my interpretation of the language of the claims should not be taken by you as an indication that I have

¹² *Optis Wireless Tech., LLC v. Apple Inc.*, 2:19-cv-0066-JRG, Trial Tr. at 186 (Preliminary Jury Instructions) (E.D. Tex. Aug. 3, 2020).

a personal opinion or any opinion regarding issues, such as infringement and invalidity. Those are your issues alone to decide.

I will provide you with more detailed instructions on the meaning of the claims before you retire to deliberate and reach your verdict. In deciding the issues that are before you, you will be asked to consider specific legal rules, and I will give you an overview of those rules now. Then, at the conclusion of the case, I will give you much more detailed instructions.

5. OVERVIEW OF ALLEGATIONS

The first issue that you are asked to decide is whether the Defendant, ecobee, has infringed any of the asserted claims of the patents-in-suit. Infringement is assessed on a claim-by-claim basis. The Plaintiff, Ollnova, must show by a preponderance of the evidence that a claim has been infringed. Therefore, there may be infringement as to one claim but no infringement as to another claim. There are also a few different ways that a patent can be infringed, and I will explain the requirements for each of these types of infringement to you in detail at the conclusion of the case. But, in general, [Ollnova must prove by] [a defendant may infringe] [a preponderance of] [the asserted patent by making, using, selling,] [evidence that ecobee made, used, sold,] or [offering] [offered] for sale in the United States or [importing] [imported] into the United States a product meeting all the requirements of a claim of the asserted patent.^{13,14}

[Now, the second] [Another] issue that you will be asked to decide is whether any of the asserted patents are invalid. Invalidity is a defense to infringement.¹⁵ Therefore, even though the

¹³ *Optis Wireless Tech., LLC v. Apple Inc.*, 2:19-cv-0066-JRG, Trial Tr. at 188 (Preliminary Jury Instructions) (E.D. Tex. Aug. 3, 2020).

¹⁴ **ecobee Objection:** Ollnova's proposed language ignores the burden to prove infringement, and improperly suggests that a product may be found to infringe absent that burden.

¹⁵ *Id.*

United States Patent and Trademark Office, or PTO, has allowed the asserted claims and even though a United States patent as issued by the PTO is presumed to be valid, you, the jury, must decide whether those claims are invalid after hearing all the evidence presented during the course of the trial. And the Defendant, ecobee, must show by clear and convincing evidence that a claim is invalid.

You may find a patent claim to be invalid for a number of reasons, including because it claims subject matter that is not patent eligible, it is not new, or it is obvious.

[Patents] [To be valid, a patent] must claim certain patent eligible subject matter. In general, a patent is directed towards eligible subject matter if it claims a process, a machine, manufacturer, or composition of a matter, or any new or useful improvement thereof. [However, if the Court determines that a patent is also] [However, there are certain types of subject matter that are not eligible for patenting. These are laws of nature, natural phenomena, and abstract ideas. There is a two-step process for determining whether patent claims cover ineligible subject matter, such as an abstract idea. Step one requires determining whether the claims are directed to an ineligible category of subject matter, such as an abstract idea. If that is the case, step two requires determining if the claims contain an inventive concept sufficient to transform the abstract idea into patent-eligible subject matter—in other words, an element or combination of elements that is sufficient to ensure that the patent at issue amounts to significantly more than a patent upon the abstract idea itself. If the Court determines that a patent is]¹⁶ directed toward an abstract idea, then the jury must determine whether the patent covers only the activities that are well-understood,

¹⁶ *Alice Corp. v. CLS Bank Int'l*, 573 U.S. 208, 134 S. Ct. 2347 (2014); *Affinity Labs of Texas, LLC v. DIRECTV, LLC*, 838 F.3d 1253 (Fed. Cir. 2016); *The Chamberlain Grp., Inc. v. Techtronic Indus. Co.*, 935 F.3d 1341 (Fed. Cir. 2019); *SAP Am., Inc. v. InvestPic, LLC*, 898 F.3d 1161 (Fed. Cir. 2018).

routine, and conventional at the time the patent was filed.^{17, 18} I'll provide you with more detailed instructions on this question at the conclusion of the trial.

For a patent claim to be invalid because it is not new, the defendant must show you by clear and convincing evidence that all of the elements or limitations of a claim are [present in a single device, system or method, or]¹⁹ sufficiently described in a single, previous patent or published patent application, and we call these items "prior art." If a claim is not new, it is said to be anticipated by the prior art.

Another way that a claim can be found to be invalid is that it may have been obvious. Even though a claim may not be anticipated because every element of a claim is not shown or sufficiently described in a single piece of prior art, the claim may still be invalid if it would have been obvious to a person of ordinary skill in the field of technology of the patent at the relevant time. You will need to consider a number of questions when deciding whether the invention claimed in the asserted patents are obvious, and I will provide you with more detailed instructions on these questions at the conclusion of the trial.

If you decide that any claim of a patent has been infringed and is not invalid, you will need to decide at that time what amount of money damages should be awarded to the Plaintiff to compensate it for the infringement by the Defendant. A damages award must be adequate to compensate the patent holder for the infringement, which in this case is measured by what the patent holder would have received had it been paid a reasonable royalty. This means that any

¹⁷ *Optis Wireless Tech., LLC v. Apple Inc.*, 2:19-cv-0066-JRG, Trial Tr. at 188 (Preliminary Jury Instructions) (E.D. Tex. Aug. 3, 2020).

¹⁸ **Ollnova's Objection:** ecobee's additional proposed discussion of § 101 law is cumbersome, confusing, and places undue explanation on this single defense, which may give the jury the impression that it is more significant or important to focus on than other issues in the case.

¹⁹ **Ollnova's Objection:** ecobee does not allege that any asserted claims are invalid for practicing any particular prior art "device, system, or method."

damages should be what two reasonable people – in this case, the patent holder and the alleged infringer – would have negotiated for a license to the patents-in-suit. The damages that you award, if any, are meant to compensate the patent holder. They are not meant to punish the Defendant. You may not include in your award any additional amount as a fine or a penalty. Additionally, damages cannot be speculative, and Ollnova must prove what two reasonable people would have negotiated by a preponderance of the evidence.

I will give you more detailed instructions on the calculation of damages at the conclusion of case. However, please be aware that the fact that I am instructing you on damages does not mean that Ollnova is or is not entitled to recover damages.

6. WITNESS TESTIMONY

Now, throughout the trial, you are going to be hearing from a number of different witnesses in this case. I want you to keep an open mind while you are listening to the evidence and not decide any of the facts until you have heard all of the evidence. This is important. While the witnesses are testifying, remember that you will have to decide the degree of credibility and believability to allocate to the witness and to the evidence they present. So while the witnesses are testifying, you should be asking yourselves things like this: Does the witness impress you as being truthful? Does the witness have a reason not to tell the truth? Does the witness have any personal interest in the outcome of the case? Does the witness seem to have a good memory? Did the witness have the opportunity and ability to observe accurately the things that they testified about? Did the witness appear to understand the questions clearly and answer them directly? And, of course, does the witness's testimony differ from the testimony of any other witness? And if it does, how does it differ? These are some of the kinds of things that you should be thinking about while you are listening to each of the witnesses over the course of this trial.

[Even though a witness may be a party to the action and therefore interested in its outcome, the testimony may be accepted if it is not contradicted by direct evidence or by any inference that may be drawn from the evidence, if you believe the testimony.]

In determining the weight to give to the testimony of a witness, consider whether there was evidence that at some other time the witness said or did something, or failed to say or do something, that was different from the testimony given by that witness at trial. A simple mistake by a witness does not necessarily mean that the witness did not tell the truth as he remembers it. People may forget some things or remember other things inaccurately. If a witness made a misstatement, consider whether that misstatement was an intentional falsehood or simply an innocent mistake. The significance of that may depend on whether it has to do with an important fact or with only a less important detail. That being said, it is exclusively in your province to believe every word that any witness says, or to disregard anything they say or do, because you all are the exclusive judges of the facts in this case. This instruction applies to the testimony of all witnesses.²⁰]

7. **[EXPERT TESTIMONY]**

I also want to talk to you briefly about expert witnesses. When knowledge of a technical subject may be helpful to you, the jury, a person who has special training and experience in that particular field, we call them an expert witness, is permitted to testify to you about his or her opinions on those technical matters. However, you are not required to accept an expert's opinion or any witness's opinions at all. It is up to you to decide whether an expert witness is correct or incorrect or whether or not you believe what they say. It is also up to you to determine whether or not any other witness in the case is correct or incorrect or whether you believe what they have to

²⁰ [Fifth Circuit Pattern Jury Instructions 2020, with revisions through June 2020, § 3.4 (with modifications).]

say. Those kinds of decisions, judging the credibility and believability of each and every witness in the case, are particularly within your area of responsibility as the jury.

Now, I anticipate that there will be expert witnesses testifying in support of each side in this case, but it will be up to you to listen to their qualifications. And when they give an opinion and explain the basis for that opinion, you will have to evaluate what they say, whether you believe it, and to what degree, if any, that you want to give it weight. [In weighing expert testimony, you may consider the expert's qualifications, the reasons for the expert's opinions, and the reliability of the information supporting the expert's opinions, as well as the factors I have previously mentioned for weighing testimony of any other witness.²¹] Remember, judging and evaluating the credibility and believability of each and every witness is an important part of your job as jurors.

Now, during the course of the trial, it is possible that there will be testimony from one or more witnesses that are going to be presented to you through what we call a deposition. In trials such as this, it is difficult to get every witness physically present in court at the same time. So prior to the trial, the lawyers for each of the parties take the depositions of the witnesses. In the deposition, a court reporter is present, the witness is present and sworn and placed under oath, just as if he or she were in open court, and the lawyers for the parties ask the witnesses questions, and those questions and the answers are recorded and taken down. Often those questions and answers are recorded not only in writing, but by a video recording as well. It is important to understand that these depositions often go on for multiple hours at a time. So with regard to witnesses who may be presented to you in this trial by deposition, rather than have you listen to the entirety of the deposition and the hours and hours of it, the parties will select those portions they think are important to present to you and those deposition designations and counter-designations by the

²¹ *EcoFactor Inc. v. ecobee Inc.*, No. 6:21-cv-00428-ADA, Dkt. 241 at 9 (W.D. Tex.).

other party will be put together and played to you as a single presentation during the course of the trial.²²

That means during these witnesses who appear by deposition, you may see or hear a different person begin to ask questions and hear a different voice. Do not think that you are missing something or something has been cut out. That is simply the process of taking the Plaintiff's designations and the Defendant's designations of that single witness from the entirety of the deposition and putting them together for a shortened, focused version to present to you as that deposition witness's testimony during the trial.

Now, the deposition testimony that may be presented to you during the trial, I want you to understand, that is entitled to the same consideration by you as any other witness. Insofar as possible, it is to be judged, weighed as to credibility, and otherwise considered by you, the jury, in the same way as if the witness had been present in person and testified physically from the witness stand.²³

8. EXHIBITS & OBJECTIONS

Now, during the trial of the case, it is possible that the lawyers will make certain objections. And if they do, I will make rulings on those objections. It is the duty of an attorney for each side of the case to object when the other side offers testimony or other evidence that the attorney believes is not proper under the orders of the Court or the Rules of Evidence or Procedure.

Now, upon allowing the testimony or other evidence to be introduced over the objection of an attorney, the Court does not, unless expressly stated, indicate an opinion as to the weight or

²² *Vocalife LLC v. Amazon.com, Inc.*, No. 2:19-cv-0123-JRG, Trial Tr. at 145-146 (Preliminary Jury Instructions) (E.D. Tex. Oct. 1, 2020).

²³ *Id.* at 146-147.

effect of such evidence. As I have said before, you, the jury are the sole judges of the credibility and believability of all the witnesses and the weight and what effect to give to all the evidence.

[Now, the parties in this case, both the Plaintiff and Defendant, have worked very diligently with the Court to go through all the exhibits that may be shown to you over the course of the trial. So I have already considered the arguments from the parties as to the admissibility of these exhibits, and I have ruled on the admissibility of these exhibits. And I promise you, that has saved you a lot of time now that you are in the jury box as jurors to hear the evidence.

There were hundreds of exhibits presented, and I have considered and ruled on every one of them, and those have been reduced to a known list of pre-admitted exhibits that I have already decided are admissible. That means those exhibits can be shown to you over the course of the trial without having to go through a presentation of the basis on which they are admissible, an objection from the other party, and arguments about which side is right and whether the document is or is not admissible under the Rules of Evidence and then ultimately I reach a conclusion and a ruling. All of that has been done on each of these exhibits before today. So you do not have to sit there and listen to that process. And I promise you, it has saved a lot of time going forward as to how we would have to handle it otherwise.

And both sides have worked diligently with me to accomplish that process. So you should understand through these pre-trial procedures, I have already made rulings about the admissibility of all the exhibits, and this has saved a lot of time.^{24,25}

²⁴ *Optis Wireless Tech., LLC v. Apple Inc.*, 2:19-cv-0066-JRG, Trial Tr. at 195-97 (Preliminary Jury Instructions) (E.D. Tex. Aug. 3, 2020).

²⁵ **ecobee's Objection:** ecobee objects to this language as incorrect, misleading and confusing, including the suggestion that the parties presented "hundreds of exhibits" to the Court. It is unclear why this language is necessary.

However, it is still] [It is] possible that objections will arise during trial. If I should sustain an objection to a question addressed to a witness, then you must disregard that question entirely, and you may draw no inference from its wording or speculate about what the witness would have said if I had allowed them to answer the question. On the other hand, if I overrule an objection addressed to a question to a witness, then you should consider the question and the witness's answer just as if no objection had ever been made.

You should know that the law of the United States permits a United States District Judge to comment to the jury regarding the evidence in a case, but those comments from the judge may be disregarded by the jury in their entirety because as I have told you it is the jury that is the sole judges of the facts in the case. You are the sole judges of the credibility of the witnesses, and the amount of weight, you want to give to each witness's testimony.

Even though the law may permit me to make comments to you about the evidence in this case, as I indicated during jury selection earlier today, it is my intention to try very hard not to comment on any of the evidence or the witnesses throughout the trial because I believe strongly that is your responsibility, and even though I have the right to comment on them, I am going to work hard not to.

Now, you should also know that the court reporter in front of me, Mr. McRoberts, is taking down every word that is said in the courtroom throughout the trial, but the written transcript of all of that is not going to be available to you to consider during your deliberations. That transcript is prepared in case there is an appeal of this case to an appellate court. So that means you are going to have to rely on your memories of the evidence that is developed over the course of the trial.

9. JURY NOTEBOOKS

In a moment, each of you are going to be given a juror notebook. In the back of that notebook, you are going to find a legal pad that you can use to take notes on if you choose to throughout the course of the trial. It will be up to each of you to decide whether or not you want to take notes about the witnesses or anything else regarding the trial, and how detailed you want those notes to be if you decide to take notes. But, remember, those notes are for your own personal use. You still have to rely on your memory of the evidence, which is why you should be paying close attention to the testimony of each and every witness. You should not abandon your own recollection because somebody else's notes indicate something different. Your notes, if you keep them, are to refresh your recollection only, and that is the only reason you should be keeping them.

I am now going to ask our Court Security Officer to pass out these juror notebooks to each of the members of the jury.

In these notebooks, you will see that you have a copy of each of the four asserted patents that are at issue in this case and that we have talked about.

You will also find a section of tabbed pages for all of the witnesses that we expect may testify over the course of the trial. Behind those tabs you will find a page for each witness with their head and shoulders photograph superimposed at the top of the page. The Court often finds that jurors benefit from being able to see a picture of the person that testified when they are trying to reconstruct and reconsider all the evidence that has been given over the course of a trial. Below the photograph of each witness, there are lines that you can use to take additional notes on, if you choose to.

You will also find in there a list of the claim terms or language that the Court has already construed and given you definitions or constructions for. Again, those constructions that the Court

has given you must be applied by you to the language of the claims when you decide the issues of infringement and invalidity.

These notebooks should be in your possession at all times. They are not to be left unattended. They should either be with you in the jury box where you have them now or at the end of the day when you leave, you should take them to the jury room and leave them closed on the table in the jury room so that you can pick them up the next morning. There may be times over the course of the trial when we are going to take a brief recess and only be out of the courtroom for a few minutes. In that case, you may simply close and leave your notebooks in your chairs. And in that case, just leave them in your chairs, recess to the jury room, and then when we are back in a short period of time, they will be there waiting for you. But if we are going to be out of the courtroom for any length of time, I am going to ask you to take those juror notebooks with you and keep them in your possession.

You will also find in the front a pen for note-taking in case you do not already have one. I would suggest that in the front cover, you write your name so you make sure that you keep yours, and don't get it confused with anybody else's, and they don't need to be passed around by you.²⁶

10. OPENING STATEMENTS & PRESENTATION OF EVIDENCE

Now, in a moment, the attorneys for the parties are going to present their opening statements. These opening statements are designed to give you a roadmap of what each side expects that the evidence will show in this case. You should remember throughout the trial, that what the lawyers tell you is not evidence. I want to say that again. What the lawyers tell you is not evidence.

²⁶ *Vocalife LLC v. Amazon.com, Inc.*, No. 2:19-cv-0123-JRG, Trial Tr. at 151-153 (Preliminary Jury Instructions) (E.D. Tex. Oct. 1, 2020).

The evidence in the case is the sworn testimony of the witnesses presented under oath and subject to cross-examination, whether it is through a live witness or through a deposition witness, as I have already described to you. The evidence will include those exhibits which I have already considered and found are admissible under the Rules of Evidence and are an admitted exhibit in this case.

That is the totality of the evidence in this case. What the lawyers tell you is not evidence in the case. What they tell you, in fact is their impression of what the evidence should be. And they have a duty to point out to you where they believe the evidence is. But, remember, what they tell you is not evidence.

After the opening statements are given by each side, Ollnova will have the opportunity to call their witnesses and put on their evidence. That is called the Ollnova's case-in-chief. When Ollnova has finished putting on its witnesses and evidence, it will rest its case-in-chief, and then ecobee has the opportunity to call its witnesses and put on its evidence. And that is called ecobee's case-in-chief. [ecobee also has the opportunity, if it chooses, to call what are called rebuttal witnesses to address the evidence that Ollnova has put on in its case-in-chief.] After ecobee rests its case-in-chief, Ollnova has the opportunity, if it chooses, to call [what are called] rebuttal witnesses to address the evidence that ecobee has put on [in its case-in-chief]. After Ollnova puts on any rebuttal witnesses, if they choose to, then you will have heard all the evidence in this case.

And when you have heard all the evidence in this case, at that point, I will give you written instructions on the law that we have talked about and that you are to apply to the evidence that you have heard, and you will have your own individualized printed copy of those written instructions on the law I am going to give you. And you may take that copy with you to the jury room when you retire to deliberate. The instructions that I will give you at that point are called the "final

instructions to the jury” or the “charge to the jury” and will be in written form, but I will give them to you orally, as well.

After I have given you my final instructions, the lawyers will present their closing arguments, which are designed to point out what they believe they have proved over the course of the trial and through the evidence that has come in during the trial. Once you have heard the lawyers’ closing arguments, you will retire to the jury room to consider the questions in the verdict form and reach a unanimous decision as to those questions. Those unanimous answers to those questions, as I have told you, will constitute your verdict in this case.

11. CONDUCT OF JURY

Let me repeat my earlier instruction to you. You are not to discuss this case among yourselves or with anyone else during the trial. When I say not to discuss the case, I mean not to communicate about this case in any way. That applies to anybody outside this courtroom, and until you have heard all the evidence in this case, it applies to all of you with each other. During the course of the trial, at lunch breaks and recesses, you are not to discuss evidence amongst yourselves.

Only when you have heard all the evidence and only when I instruct you to retire to the jury room to deliberate on your verdict after I have given you my final instructions and you have heard closing arguments from the attorneys, that will be the first time that you are supposed to discuss the evidence amongst yourselves. When you have heard all the evidence and when you retire at my instruction to the jury room to deliberate on the verdict it becomes your duty to discuss the evidence that was presented over the course of the trial in your effort to reach a unanimous decision as to the questions that are presented in the verdict form.

I also want to remind you that over the course of the trial, these lawyers, their staff, witnesses, and the parties' representatives are not going to talk to you if they see you in close proximity. If you run into one of them on the front steps coming into the courthouse one morning and they are not friendly and they do not speak, do not consider them to be rude or unfriendly. Do not hold it against them. They are simply doing what I have instructed them to do.

With these instructions, we are now going to proceed to hear opening statements from the parties.

INSTRUCTIONS AT CLOSE OF EVIDENCE²⁷

1. INTRODUCTION

Ladies and Gentlemen:

You have now heard all the evidence in this case, and I will now instruct you on the law that you must apply.

Each of you will have your own printed copy of these final jury instructions when you retire to the jury room to deliberate in a few moments. You are welcome to take notes, if you like, but I want you to know you will have your own written copy of these instructions to review when you retire to the jury room.

It is your duty to follow the law as I give it to you. On the other hand, as I have previously said, you, the jury, are the sole judges of the facts in this case. Do not consider any statement that I have made over the course of the trial or that I might make during these instructions as an indication to you that I have any opinion about the facts in this case. If I have given you the impression during the trial that I favor either party, you must disregard that impression. Other than

²⁷ *Optis Wireless Tech. LLC v. Apple Inc.*, No. 2:19-cv-0066-JRG, Trial Tr. at 954-992 (Final Jury Instructions) (E.D. Tex. Aug. 10, 2020).

my instructions to you on the law, you should disregard anything I may have said or done during the trial in arriving at your verdict.

You are about to hear closing arguments from the attorneys. Statements and arguments of the attorneys, I remind you, are not evidence and they are not instructions on the law. They are intended only to assist the jury in understanding the evidence and the parties' contentions.

A verdict form has been prepared for you. You are to take this verdict form with you to the jury room, and when you have reached a unanimous decision or agreement as to the verdict, you will have your foreperson fill in the blanks in the verdict form reflecting those unanimous agreements, sign it, date it, and then deliver it to the Court Security Officer.

Answer each question in the verdict form from the facts as you find them to be. Do not decide who you think should win the case and then answer the questions to reach that result. Again, your answers and your verdict in this case must be unanimous.

2. CONSIDERING WITNESS TESTIMONY

In determining whether any fact has been proven in this case, you may, unless otherwise instructed, consider the testimony of all the witnesses, regardless of who may have called them, and you may consider the effect of all the exhibits received and admitted into evidence, regardless of who may have produced or presented them. In deciding whether to accept or rely upon the testimony of any witness, you may also consider any bias of the witness. You, the jurors, are the sole judges of the credibility of each and every witness and the weight and effect to be given to the evidence in this case.

[Even though a witness may be a party to the action and therefore interested in its outcome, the testimony may be accepted if it is not contradicted by direct evidence or by any inference that may be drawn from the evidence, if you believe the testimony.]

In determining the weight to give to the testimony of a witness, consider whether there was evidence that at some other time the witness said or did something, or failed to say or do something, that was different from the testimony given by that witness at trial. A simple mistake by a witness does not necessarily mean that the witness did not tell the truth as he or she remembers it. People may forget some things or remember other things inaccurately. If a witness made a misstatement, consider whether that misstatement was an intentional falsehood or simply an innocent mistake. The significance of that may depend on whether it has to do with an important fact or with only a less important detail. That being said, it is exclusively in your province to believe every word that any witness says, or to disregard anything they say or do, because you all are the exclusive judges of the facts in this case. This instruction applies to the testimony of all witnesses.²⁸]

Now, during the course of the trial, you may have been shown documents with some portions of those documents redacted. In those situations, you should not speculate about what may have been redacted or why it was redacted. Those redactions were approved by the Court prior to when the trial began.

As I have previously told you, the attorneys in this case are acting as advocates for the competing parties and their competing claims. They have a duty to object when they believe evidence is offered that should not be admitted under the rules of the Court. In that case, when I have sustained an objection to a question addressed to a witness, you are to disregard the question entirely, and you may not draw any inferences from its wording or speculate about what the witness would have said if I had permitted them to answer the question. However, on the other hand, if I overruled an objection to a question addressed to a witness, then you are to treat the answer to the

²⁸ [Fifth Circuit Pattern Jury Instructions 2020, with revisions through June 2020, § 3.4 (with modifications).]

question and the question itself as if no objection had been made; that is, like any other question and answer during the trial.

Now, at times during the trial it was necessary for me to talk to the lawyers outside of your hearing and your presence. This happens during trials because there are things that sometimes come up that do not involve the jury. You should not speculate about what was said during these discussions that took place outside your presence.

3. HOW TO EXAMINE THE EVIDENCE

Now, there are two types of evidence that you may consider in properly finding the truth as to the facts in this case. One is direct evidence, such as the testimony of an eyewitness. The other is indirect, or sometimes called circumstantial evidence. That is the proof of a chain of circumstances that indicates the existence or nonexistence of certain other facts. As a general rule, you should know that the law makes no distinction between direct or circumstantial evidence, but simply requires that you, the jury, find the facts based on the evidence presented during the trial, both direct and circumstantial. [That does not mean you have to believe all of the evidence. It is entirely up to you to give the evidence you received in this case whatever weight you individually believe it deserves. It will be up to you to decide which witnesses to believe, which witnesses not to believe, the weight you give any testimony you hear, and how much of any witness's testimony you choose to accept or reject.]

You should never be influenced by my ruling on any objection. If I sustain an objection, then just pretend the question was never asked. If an answer is given, ignore it. If I overrule the objection, act like the objection was never made. If I give you instructions that some item of evidence is received for a limited purpose, you must follow my instruction. If I give any limiting

instruction during trial, you must follow it. Any testimony I tell you to exclude or disregard is not evidence and may not be considered.^{29]}

Now, the Parties may have stipulated or agreed to certain facts in the case. When the lawyers for both sides stipulate or agree as to the existence of a fact, you must, unless otherwise instructed, accept the stipulation as evidence and regard the fact as proven.

Certain testimony over the course of trial has been presented to you through depositions. A deposition is the sworn, recorded answers to questions asked to a witness in advance of the trial. If a witness cannot be present to testify in person, then the witness's testimony may be presented under oath in the form of a deposition. As I told you earlier, before the trial, the attorneys representing the parties questioned these deposition witnesses under oath. At that time, a court reporter was present, and recorded their sworn testimony. Both sides have had the opportunity to choose portions of that testimony to be played in open court.

Deposition testimony is entitled to the same consideration by you, the jury, as testimony given by a witness who appears in person physically from the witness stand. Accordingly, you should judge the credibility and importance of the deposition testimony to the best of your ability, just as if the witness had appeared in person and testified before you in open court.

Now, while you should consider only the evidence in this case, you should understand that you are permitted to draw such reasonable inferences from the testimony and the exhibits as you feel are justified in the light of common experience. In other words, you may make deductions and reach conclusions based on reason and common sense that leads you to draw from the facts that have been established by the testimony and the evidence in this case. However, you should not

²⁹ *EcoFactor Inc. v. ecobee Inc.*, No. 6:21-cv-00428-ADA, Dkt. 241 at 5-6 (W.D. Tex.).

base your decisions on any evidence not presented by the parties in open court during the course of the trial.

Now, unless I instruct you otherwise, you may properly determine that the testimony of a single witness is sufficient to prove any fact, even if a greater number of witnesses may have testified to the contrary if, after considering all of the other evidence, you believe that single witness.

[You must not conduct any independent research or investigation. You must make your decision based only on the evidence here, and nothing else.]

4. EXPERT WITNESSES

When knowledge of a technical subject may be helpful to the jury, a person who has special training and experience in that technical field, called an expert witness, is permitted to state his or her opinions on those technical matters to the jury. [However, you are not required to accept those opinions. As with any other witness, it is solely up to you to decide who you believe and who you don't believe and whether or not you want to rely on their testimony. In deciding whether to accept or rely upon the opinion of an expert witness, you may consider any bias of the]³⁰ [In weighing expert testimony, you may consider the expert's qualifications, the reasons for the expert's opinions, and the reliability of the information supporting the expert's opinions, as well as the factors I have previously mentioned for weighing testimony of any other]³¹ witness.

³⁰ *Optis Wireless Tech., LLC v. Apple Inc.*, No. 2:19-cv-0066-JRG, Trial Tr. at 959 (Jury Instructions at Close of Evidence) (E.D. Tex. Aug. 10, 2020).

³¹ *EcoFactor Inc. v. ecobee Inc.*, No. 6:21-cv-00428-ADA, Dkt. 241 at 9 (W.D. Tex.).

[Expert testimony should receive whatever weight and credit you think appropriate, given all the other evidence in the case. You are not required to accept the opinion of any expert, rather, you are free to accept or reject the testimony of experts, just as with any other witness.³²]

5. [CHARTS AND SUMMARIES³³]

6. [Certain charts and summaries have been shown to you solely to help explain or summarize the facts disclosed by the books, records, other documents and testimony that are in evidence. These charts and summaries are not evidence or proof of any facts. You should determine the facts from the evidence.] DEMONSTRATIVES

Certain exhibits may have been shown to you during the course of the trial that were illustrations, such as PowerPoint presentations, posters, and models. We call these types of exhibits “demonstrative exhibits” or sometimes just “demonstratives” for short. Demonstrative exhibits are a party’s description, picture, or model to describe something involved in the trial. If your recollection differs from the demonstratives, you should rely on your recollection. Remember, demonstrative exhibits, which are sometimes called “jury aids,” are not evidence, but the witness’s testimony during which a demonstrative is used is evidence. While demonstratives may be helpful in determining the issues, the demonstratives of both parties are not evidence and they are not proof of any facts. These demonstratives will not be available to you to consider during your deliberations.³⁴

³² *EcoFactor Inc. v. ecobee Inc.*, No. 6:21-cv-00428-ADA, Dkt. 241 at 9 (W.D. Tex.).

³³ [Fifth Circuit Pattern Jury Instructions 2020, with revisions through June 2020, § 2.7.]

³⁴ *Vocalife LLC v. Amazon.com, Inc.*, No. 2:19-cv-0123-JRG, Trial Tr. at 1303 (Jury Instructions at Close of Evidence) (E.D. Tex. Oct. 8, 2020).

7. [NO INFERENCE FROM FILING SUIT³⁵]

[The fact that a company brought a lawsuit and is in court seeking damages creates no inference that the company is entitled to a judgment. Anyone may make a claim and file a lawsuit. The act of making a claim in a lawsuit, by itself, does not in any way tend to establish that claim and is not evidence.]

8. [BIAS – CORPORATE PARTY INVOLVED³⁶]

[Do not let bias, prejudice, or sympathy play any part in your deliberations. A corporation and all other persons are equal before the law and must be treated as equals in a court of justice.]

9. [LIMITING INSTRUCTION³⁷]

[When testimony or an exhibit is admitted for a limited purpose, you may consider that testimony or exhibit only for the specific limited purpose for which it was admitted.]

10. BURDENS OF PROOF

In any legal action, facts must be proven by a required amount of evidence known as the burden of proof. The burden of proof in this case is on the Plaintiff, Ollnova, for some issues and on the Defendant, ecobee, for other issues. There are two burdens of proof that you will apply in this case. One is the preponderance of the evidence. The other is clear and convincing evidence.

The Plaintiff in this case, Ollnova, has the burden of proving patent infringement by a preponderance of the evidence. Ollnova also has the burden of proving damages for any alleged patent infringement by a preponderance of the evidence.

³⁵ [Fifth Circuit Pattern Jury Instructions 2020, with revisions through June 2020, § 3.6; *Freshub, Inc. v. Amazon.com, Inc.*, No. 6:21-cv-511-ADA, Dkt. 247 at 5-6 (W.D. Tex. June 22, 2021); *ESW Holdings, Inc. v. Roku, Inc.*, No. 6:19-cv-00044-ADA, Dkt. 172 at 1-2 (W.D. Tex. Apr. 9, 2021).]

³⁶ [Fifth Circuit Pattern Jury Instructions 2020, with revisions through June 2020, § 2.16.]

³⁷ [Fifth Circuit Pattern Jury Instructions 2020, with revisions through June 2020, § 2.6.]

A preponderance of the evidence means evidence that persuades you, the jury, that a claim is more probably true than not true. Sometimes this is talked about as being the greater weight and degree of credible testimony. [If you find that Ollnova has failed to prove any element of its claim by a preponderance of the evidence, it may not recover on that claim.]

Now, the Defendant in this case, ecobee has the burden of proving patent invalidity by clear and convincing evidence. Clear and convincing evidence means evidence that produces in your mind [an abiding] [a firm belief or] conviction [that] [as to] the truth of the [party's factual contentions are highly probable.] [matter sought to be established.] Although proof to an absolute certainty is not required, the clear and convincing evidence standard requires a greater degree of persuasion than is necessary for the preponderance of the evidence standard. [If the proof establishes in your mind, an abiding conviction in the truth of the matter, then the clear and convincing evidence standard has been met.]³⁸

Now, as I told you previously, these burdens of proof, neither one, are to be confused with the burden of proof called “beyond a reasonable doubt,” which is the burden of proof we apply in criminal cases. The burden of proof, beyond a reasonable doubt, does not apply in this or any other civil case. You should not confuse clear and convincing evidence with evidence beyond a reasonable doubt. Clear and convincing evidence is not as high a burden as beyond a reasonable doubt, but it is a higher burden than the preponderance of the evidence.

Now, in determining whether any fact has been proven by a preponderance of the evidence or by clear and convincing evidence, you may, unless otherwise instructed, consider the stipulations of the parties, the testimony of the witnesses, regardless of who called them, and all

³⁸ *Optis Wireless Tech., LLC v. Apple Inc.*, No. 2:19-cv-0066-JRG, Trial Tr. at 961 (Jury Instructions at Close of Evidence) (E.D. Tex. Aug. 10, 2020).

the exhibits received and admitted into evidence during the course of the trial, regardless of who may have produced or presented them.

11. CONTENTIONS OF THE PARTIES

Now, as I did at the beginning of the case, I will give you a summary of each side's contentions, and I will provide you with detailed instructions on what each side must prove to win on each of its contentions.

As I told you previously, this action is one for patent infringement. This case concerns four separate United States Patents. They are: United States Patent No. 7,746,887, which you have heard referred to throughout the trial as the '887 or '887 patent; United States Patent No. 7,860,495, which you have heard referred to as the '495 or the '495 patent; United States Patent No. 8,224,282, which you have heard referred to as the '282 or the '282 patent; and United States Patent No. 8,264,371, which you have heard referred to as the '371 or the '371 patent. I will refer to these as the patents-in-suit or as the asserted patents, and in so doing, I'm referring to all four of them collectively.

Ollnova has alleged that ecobee's making, using, selling, offering for sale, or importing certain thermostats and remote sensors directly or indirectly infringe the asserted claims. The products that are alleged to infringe are smart thermostats called the ecobee Smart Si Thermostat, ecobee3, ecobee3 lite, ecobee4, ecobee SmartThermostat with Voice Control, ecobee Smart Thermostat Enhanced, ecobee Smart Thermostat Premium, and, for the '495 patent, the remote sensor device called ecobee SmartSensor. Sometimes in these instructions I will refer to these products in shorthand by just calling them the accused products.

Ollnova contends that the accused products infringe the following claims:

- Claims 1, 11, 12, 20, and 21 of the '887 patent;

- Claims 1 and 2 of the '495 patent;
- Claims 1, 3, 6, and 21 of the '282 patent; and
- Claims 1, 4, 5, 17, and 19 of the '371 patent.

These claims are sometimes referred to as the “asserted claims.” Ollnova also alleges that ecobee has actively induced infringement of the Asserted Claims by others and contributed to the infringement of the Asserted Claims by others.

Ollnova seeks money damages in the form of a reasonable royalty for the alleged infringement of the Defendant.

The Defendant, ecobee, denies that the accused products infringe the asserted claims of the asserted patents. In other words, ecobee contends that ecobee did not make, use, sell, offer for sale, or import products that infringe any of the asserted claims of any of the asserted patents. ecobee also contends that the asserted claims are invalid. In other words, ecobee contends that they are not patent eligible, or were anticipated or rendered obvious by prior art that existed before Ollnova’s alleged inventions. Invalidity is a defense to infringement. Remember invalidity and infringement are separate and distinct issues. Separately, ecobee also contends the elements of asserted claims of the '495 patent both individually and as an ordered combination involve no more than well-understood, routine, and conventional activities understood by a person of skill in the art as of April 9, 2004. ecobee also denies that it owes Ollnova any damages in this case.

Your job, members of the jury, is to decide whether Ollnova has proven that ecobee has infringed any of the asserted claims of the patents. You must also decide whether ecobee has proven that any of the asserted claims of the asserted patents are invalid.

If you decide that any of the asserted claims have been infringed and are not invalid, then you will need to decide the amount of money damages [are to] [Ollnova has proven should] be

awarded to [Ollnova to] compensate it for [that] [the] infringement. [In doing so, you should consider the evidence that both Ollnova and ecobee have presented to you.]

12. [ESTABLISHED FACTS]

[I will now instruct you on a number of established facts and you must take these facts as true when deciding the issues in this case.]

1. The Plaintiff owned the '887 patent, '495 patent, '282 patent, and '371 patent as of the filing of this action and continues to own these patents.

2. ecobee admits that each Accused Product has been sold or offered for sale in the United States.

3. ecobee admits that it has not redesigned any of the Accused Products to avoid infringement of the Asserted Patents after Ollnova commenced this Action.

4. ecobee admits that it has not determined any specific numerical cost to redesign any of the Accused Products to avoid infringement of the Asserted Patents.

5. ecobee admits that it is not aware of any ecobee employee identified in its Initial Disclosures that has read any of the Asserted Patents as of March 14, 2023.

6. ecobee admits that it is not aware of any ecobee employee identified in its Initial Disclosures that has an opinion on whether or not the Accused Products infringe the Asserted Patents.

7. ecobee admits that it is not aware of any ecobee employee identified in its Initial Disclosures that has an opinion on whether or not the Asserted Patents are valid.

8. ecobee admits that each of the ecobee Smart Thermostat with Voice Control, ecobee3, ecobee4, ecobee Thermostat Premium, ecobee Thermostat Enhanced, and ecobee3 Lite

includes [REDACTED]

9. ecobee admits that each of the Accused Products includes components capable of measuring indoor temperature.

10. ecobee admits that each of the Accused Products includes memory.

11. ecobee admits that each of the Accused products includes a processor.

12. ecobee admits that each of the Accused Products includes memory capable of [REDACTED]

13. [Placeholder for additional facts after summary judgment]^{39,40}

13. [12.] PATENT CLAIMS

Before you can decide many of the issues in this case, you need to understand the role of the patent claims.

The claims of a patent are numbered sentences at the end of the patent. The claims define the patent owner's rights under the law. The claims are important because it is the words of the claims themselves that define what the patent covers. The figures and the text in the rest of the patent are intended to provide a description or examples of the invention, and they provide a context for the claims; but it is the claims that define the breadth of the patent's coverage.

³⁹ *Optis Wireless Tech., LLC v. Apple Inc.*, No. 2:19-cv-0066-JRG, Trial Tr. at 965 (Jury Instructions at Close of Evidence) (E.D. Tex. Aug. 10, 2020); Joint Pretrial Order.

⁴⁰ **ecobee's Objection:** ecobee objects to the inclusion of these statements, at least because it usurps the role of the jury as factfinder, and it is likely to confuse the jury as to the meaning and meaning, scope and purpose of these statements. This is also an incomplete list of party "admissions," and inclusion of a full list would be cumbersome, confusing, and places undue explanation on certain facts.

[Each claim is effectively treated as if it were its own separate patent, and each claim may cover more or may cover less than any other claim.]⁴¹ Therefore, what a patent covers collectively or as a whole depends on what each of its claims cover.

14. [13.] CLAIM CONSTRUCTION

You will first need to understand what each claim covers in order to decide whether or not there is infringement of that claim and to decide whether or not the claim is invalid. The first step is to understand the meaning of the words used in the patent claim. Now, the law says that it is my role as the judge to define the terms of the claims, but it is your role as the jury to apply my definitions to the issues that you are asked to decide in this case.

Accordingly, as I explained at the beginning of the case, I have determined the meaning of certain claim language and I have provided to you definitions of those claim terms in your juror notebooks. You must accept my definitions of these words in the claims as being correct. It is your job to take these definitions that I have supplied and apply them to the issues that you are asked to decide, including the issues of infringement and invalidity. [You should disregard any evidence presented at trial that contradicts or is inconsistent with the constructions and definitions that I have given you.]

My interpretation of the claim terms should not be taken by you as an indication that I have any view regarding the issues of infringement or invalidity. The decisions regarding these issues, infringement, and invalidity are yours to make. For any claim limitations where I have not construed—that is, defined or interpreted—any particular term, you are to use the plain and

⁴¹ *Optis Wireless Tech., LLC v. Apple Inc.*, No. 2:19-cv-0066-JRG, Trial Tr. at 966 (Jury Instructions at Close of Evidence) (E.D. Tex. Aug. 10, 2020).

ordinary meaning of that term as understood by one of ordinary skill in the art, which is to say in the field of technology of the patent at the time of the alleged invention.

The meaning of the words of the patent claims must be the same when deciding both the issues of infringement and validity. [My claim constructions, as well as constructions to which the parties stipulated, are as follows:]

[Claim Constructions for the Asserted Patents]⁴²

Claim Term	Construction
“a multi-sensor package” (’282 patent, claims 1, 20)	“a single packaged sensor device, not a group of individual sensors”
“receive sensor control information related to sensor data in control at a second automation component in communication with the building automation system” (’282 patent, claim 1)	“receive information that identifies which sensor or sensor value is driving or controlling a second automation component in communication with the building automation system”
“[first/second] automation component” (’282 patent, claims 1, 20)	“[first/second] component designed to operate without human interaction in an automation system”
“chance” (’887 patent, claim 1)	“change”
“wherein transmission of the most recent reading of the indicator stored in the memory during the period of the transmission interval is suspended in response to detecting a change in the sensed condition within the predetermined range” (’887 patent, claim 1)	“wherein the transmission of the most recent reading of the indicator that would otherwise occur is stopped for the remainder of the transmission interval in response to detecting a change in the sensed condition within the predetermined range”
“information associated reading of the indicator”	“information associated with the reading of the indicator”

⁴² **Ollnova’s Objection:** Ollnova objects to including the chart of constructions in the jury instructions because the jury will already have the constructions in the juror notebooks.

('887 patent, claims 1, 21)	
“free of communications with the second wireless network” (‘495 patent, claim 1)	Plain and ordinary meaning.
“change-of-value request message” (‘371 patent, claim 1)	“a message that requests or directs an automation component to indicate if detected values, received values, parameters, or measurements have changed or altered beyond a predetermined reporting limit”
“change-of-value messages” (‘371 patent, claims 1, 17, 19)	“messages indicating if detected values, received values, parameters, or measurements have changed or altered beyond a predetermined reporting limit”

15. [14.] PATENT CLAIMS AND LIMITATIONS

I will now explain to you how a claim defines what it covers. A claim sets forth, in words, a set of requirements. Each claim sets forth its requirements in a single sentence. If a device satisfies each of these requirements in that sentence, then it is covered by and infringes the claim. There can be several claims in a patent. A claim may be narrower or broader than another claim by setting forth more or fewer requirements. The coverage of a patent is assessed on a claim-by-claim basis.

In patent law, the requirements of a claim are often referred to as the “claim elements” or they are sometimes called the “claim limitations.” When a [thing (such as a) product [or a process] meets all of the requirements of a claim, it is said it meets all of its limitations or all of its elements, and the claim is said to cover that [product] [thing]; and that [product] [thing] is said to fall within the scope of that claim. In other words, a claim covers a product [or process] where each of the claim elements or limitations is present in that product [or process].

If a product [or process] is missing even one limitation or element of a claim, the product is not covered by that claim. [However, it does not mean that every word of the claim must exist identically in the accused products].^{43,44} If the product [or process] is not covered by the claim, the product [or process] does not infringe the claim.

16. [15.] INDEPENDENT V. DEPENDENT CLAIMS

Now, this case involves two types of patent claims: independent claims and dependent claims. An independent claim does not refer to any other claim in the patent. An independent claim sets forth all the requirements that must be met in order to be covered by the claim. It is not necessary to look to any other claim to determine what an independent claim covers. In this case, the following asserted claims are independent claims:

- Claim 1 of the '282 Patent is an independent claim;
- Claim 1 of the '887 patent is an independent claim;
- Claim 1 of the '495 patent is an independent claim; and
- Claims 1 and 17 of the '371 patent are independent claims.

On the other hand, a dependent claim does not by itself recite all the requirements of the claim, but refers to another claim or claims for some of its requirements. In this way, the dependent claim depends on another claim. The remainder of the claims asserted in the '282, '887, '495, and '371 patents are dependent claims. [There is one more independent claim that is not asserted by Ollnova, but is important to consider. That is claim 20 of the '282 patent. Ollnova has asserted

⁴³ *Optis Wireless Tech., LLC v. Apple Inc.*, No. 2:19-cv-0066-JRG, Trial Tr. at 968-69 (Jury Instructions at Close of Evidence) (E.D. Tex. Aug. 10, 2020).

⁴⁴ **ecobee's Objection:** ecobee objects to this language because it suggests that infringement may be found through equivalents, when Ollnova and its experts have not asserted any infringement arguments under the doctrine of equivalents.

dependent claim 21 of the '282 patent, and claim 21 depends from claim 20. Therefore, claim 21 of the '282 patent includes all of the limitations of claim 21 itself, as well as all of the limitations of claim 20, from which it depends.]

The law considers a dependent claim to incorporate all the requirements of the claim or claims to which it refers, or as we sometimes say, from which it depends, as well as the additional claims set forth in the dependent claim itself. To determine what a dependent claim covers, it is necessary to look at both the dependent claim itself and any other claim or claims to which it refers or from which it depends. A product that meets all the requirements of both the dependent claim and the claim or claims to which it refers or from which it depends is covered by that dependent claim. [For example, if an independent claim covers “a table comprising a tabletop, legs, and glue,” and a dependent claim covers “the table, wherein the tabletop is rectangular,” then to fall within the dependent claim, an accused table must have a tabletop, legs, and glue, and the tabletop must also be rectangular.]

17. [16.] COMPRISING

Certain claims of the asserted patents use the word “comprising.” [Comprising] [The word “comprising,” when used in the preamble,] means [“]including [but not limited to”] or [“]containing [but not limited to.”]. When the word “comprising” is used [in the preamble], a product that includes all the limitations or elements of the claim, as well as additional elements, is covered by the claim.

However, if a product is missing even one element or limitation of a claim, it does not meet all the requirements of the claim and is not covered by the claim. If a product is not covered by the claim, that claim is not infringed.

For example, if you take a claim that covers the invention of a table, if the claim recites a table comprising a tabletop, four legs, and the nails to hold the legs and the tabletop together, the claim will cover any table that contains [every one of] these structures, even if the table also contains other structures, such as leaves that would go in the tabletop or wheels that would go on the ends of the legs. [Now, that's a simple example using the word "comprising" and what it means. In other words, it can have other features in addition to those that are covered by the patent.]⁴⁵ [However, a claim that recites a table comprising a tabletop, four legs, and the nails to hold the legs and the tabletop together would not cover a table that includes a tabletop and four legs, but no nails to hold the hold the legs and tabletop together.]

[In a claim, "a" or "an" means "one or more." The subsequent use of definite articles 'the' or 'said' in a claim to refer back to the same claim term introduced with "a" or "an" does not change the plural rule, but simply reinvokes that non-singular meaning.⁴⁶]⁴⁷

18. [17.] INFRINGEMENT

I will now instruct you on [infringement in more detail] [how to decide whether or not Ollnova has proven that ecobee has infringed the Asserted Claims of the Asserted Patents.]. If a person makes, uses, sells, or offers for sale within the United States or imports into the United States what is covered by a patent claim without the patent owner's permission, that person is said to infringe the patent. [In this case, Ollnova alleges three possible ways that a claim may be

⁴⁵ *Optis Wireless Tech., LLC v. Apple Inc.*, No. 2:19-cv-0066-JRG, Trial Tr. at 971 (Jury Instructions at Close of Evidence) (E.D. Tex. Aug. 10, 2020).

⁴⁶ [01 *Communique Lab., Inc. v. LogMeIn, Inc.*, 687 F.3d 1292, 1297 (Fed. Cir. 2012) *aff'd* by 563 Fed. Appx. 770 (Fed. Cir. 2014) (citing *Baldwin Graphic Sys., Inc. v. Siebert, Inc.*, 512 F.3d 1342 (Fed. Cir. 2008)).]

⁴⁷ **ecobee's Objection:** ecobee objects to this language, including because it is the subject of a pending Summary Judgment motion, and it further is confusing, misleading, requires further explanation that places undue explanation on this concept.

infringed. The three types of infringement are called: (1) direct infringement; (2) active inducement; and (3) contributory infringement. Active inducement and contributory infringement are referred to as indirect infringement. ecobee cannot be indirectly infringing an Asserted Patent if Ollnova has not proven that someone other than ecobee is engaging in direct infringement of the Asserted Patent.

In this case, Ollnova has alleged that ecobee directly infringes the Asserted Claims of the '282, '887, '495, and '371 patents. In addition, Ollnova alleges that ecobee is liable for actively inducing direct infringement of the Asserted Claims of the Asserted Patents by third-party customers. Ollnova also alleges that ecobee is liable for contributing to direct infringement of the Asserted Claims of the Asserted Patents by third-party customers.^{48]}

To determine whether there is infringement you must compare the asserted patent claims, as I have defined each of them, to the accused products. You should not compare the accused products with any specific example set out in the patent or with the prior art in reaching your decision on infringement. As I have reminded you during the trial, the only correct comparison is between the accused product and the language of the claim itself.

You must reach your decision as to each assertion of infringement based on my instructions about the meaning and the scope of the claims, the legal requirements for infringement, and the evidence presented to you by both of the parties.

I will now instruct you on the specific rules that you must follow to determine whether Ollnova has proven that ecobee has infringed one or more of the patent claims involved in this case[, with respect to each of these types of infringement.]

⁴⁸ [The Federal Circuit Bar Association Model Patent Jury Instructions (May 2020) § B.3.1 (with modifications).]

19. [18.] [LITERAL] [DIRECT] INFRINGEMENT

In order to prove infringement, Ollnova must show by a preponderance of the evidence [i.e.,] that [it is more likely than not, that ecobee, made, used, sold, offered for sale within, or imported into] the [accused] [United States a] product [includes each requirement or limitation] [, or that ecobee used a method within the United States, that meets all] of the [requirements of an Asserted Claim during the times when the '282, '887, '495, and '371 patents were in force—and that ecobee did so without Ollnova's permission. You must compare each Accused Product with each and every one of the requirements of each Asserted Claim of each Asserted Patent to determine whether all of the requirements of that] claim [are met]. The issue of infringement is assessed on a claim-by-claim basis within each patent. Therefore, there may be infringement of a particular patent as to one claim, even if there is no infringement as to other claims in that patent.

In this case, Ollnova contends that ecobee literally infringes the asserted claims.

To literally infringe a patent claim, an accused product must include each and every element of the claim. Thus, in determining whether ecobee infringes Ollnova's asserted claims, you must determine if an accused product contains or performs each and every element recited in the claim of the asserted patent. A claim element is literally present if it exists in or is performed by an accused product as it is described in the claim language either as I have explained it to you or if I did not explain it according to the plain and ordinary meaning as understood by one of ordinary skill in the art.

[You must determine, separately for each asserted claim, whether or not there is infringement. For dependent claims, if you find that a claim to which a dependent claim refers is not infringed, there cannot be infringement of that dependent claim. On the other hand, if you find that an independent claim has been infringed, you must still decide, separately, whether the product

meets the additional requirement(s) of any asserted dependent claims to determine whether those dependent claims have also been infringed. A dependent claim includes all the requirements of any of the claims to which it refers plus additional requirement(s) of its own.⁴⁹

20. [DIRECT INFRINGEMENT]

A patent can be directly infringed even if the alleged infringer did not have knowledge of the patent and without the infringer knowing that what it was doing is infringement of the claim. A patent may also be directly infringed, even though the accused infringer believes in good faith that what it is doing is not infringement of the patent.

21. [19.] [INDUCED] [INDIRECT] INFRINGEMENT [- ACTIVE INDUCEMENT]

Ollnova alleges that ecobee has indirectly infringed by [actively] inducing [its users] [someone else] to directly infringe the asserted claims. As with direct infringement, you must determine whether there has been [induced infringement] [active inducement of the Asserted Claims of the Asserted Patents] on a claim-by-claim basis.

ecobee [is] [can be held] liable for induced infringement if Ollnova proves by a preponderance of evidence that:

1. Acts have [actually] been carried out by [ecobee's users] [third-party customers] that directly infringe that [claim] [Asserted Claim];

2. ecobee [has taken] [took] action [intending] [during the time the Asserted Patents were in force that was intended] to cause the infringing acts by [its users] [third-party customers]; [and]

3. ecobee [has been] [was] aware of the asserted patents[:]; and

⁴⁹ [The Federal Circuit Bar Association Model Patent Jury Instructions (May 2020) § B.3.1a (with modifications).]

4. [ecobee knew] [has known] that the acts[, if taken, would] [of its users] constitute infringement of the [asserted patents or was willfully blind to that infringement] [Asserted Claim].

[Although Ollnova need not prove that ecobee has directly infringed to prove induced infringement, Ollnova must prove that someone has directly infringed, and that the infringement was actively induced by ecobee. If there is no direct infringement by anyone, ecobee cannot have actively induced infringement of the Asserted Patents.]

To establish [induced] [active inducement of] infringement [of an Asserted Claim of an Asserted Patent], it is not sufficient that someone else directly infringes a claim, [or that ecobee's customers themselves directly infringe an Asserted Claim. Nor] [nor] is it sufficient that [the company accused of inducing another's direct infringement merely] [ecobee] had knowledge or notice of an asserted patent or had been aware of the acts by another that allegedly constitute direct infringement [of the Asserted Claim], and the mere fact that the company accused of inducing another's direct infringement had known or should have known that there was a substantial risk that someone else's acts would infringe is not sufficient.

[Rather, in order to find inducement, you must find that ecobee specifically intended or was willfully blind to that infringement.]⁵⁰ [Rather, in order to find active inducement of infringement of an Asserted Claim, you must find that ecobee specifically intended third-party customers to infringe the Asserted Claim or that ecobee believed there was a high probability that third-party customers would infringe the Asserted Claim, but deliberately avoided learning the allegedly infringing nature of the third-party customer's acts. The mere fact, if true, that ecobee knew or should have known that there was a substantial risk that third-party customer's acts would

⁵⁰ *Optis Wireless Tech., LLC v. Apple Inc.*, No. 2:19-cv-0066-JRG, Trial Tr. at 977 (Jury Instructions at Close of Evidence) (E.D. Tex. Aug. 10, 2020).

infringe the Asserted Claim would not be sufficient to support a finding of active inducement of infringement..

Moreover, if you find that ecobee was aware of the Asserted Patents, but believed that the acts it encouraged did not infringe that patent, ecobee cannot be liable for active inducement of infringement.]⁵¹

22. [20.] [INDIRECT INFRINGEMENT -] CONTRIBUTORY INFRINGEMENT⁵²[⁵³

Ollnova also alleges that ecobee is liable for contributory infringement by contributing to the direct infringement of the asserted claims[[of the Asserted Patents by ecobee customers. To prove that ecobee is liable for contributory infringement, Ollnova must prove by a preponderance of the evidence that ecobee had knowledge of the Asserted Claims of the Asserted Patents and that someone other than ecobee has directly infringed an Asserted Claim of the Asserted Patents.] As with direct infringement, you must determine contributory infringement on a claim-by-claim basis.

[Ollnova must prove all of the following by a preponderance of the evidence in order to prove that] ecobee is liable for contributory infringement of [a claim if Ollnova proves by a preponderance of the evidence that] [an Asserted Claim of an Asserted Patent]:

1. ecobee sells, offers to sell, or imports within the United States a component of a product or apparatus for use in a product or system during the time the asserted patents are in force;

⁵¹ [The Federal Circuit Bar Association Model Patent Jury Instructions (May 2020) § B.3.2 (with modifications).]

⁵² Adapted from *Synqor, Inc. v. Vicor Corp.*, No. 2:14-cv-287-RWS-JBB, Final Jury Instructions, Dkt. No. 734, Tr. at 1859:19–1861:16 (E.D. Tex. October 26, 2022); *SSL Servs., LLC v. Citrix Sys., Inc.*, Final Jury Instructions, No. 2:08-cv-158-JRG, Final Jury Instructions, Dkt. No. 272, Tr. 41:7–42:10 (E.D. Tex. June 27, 2012).

⁵³ [The Federal Circuit Bar Association Model Patent Jury Instructions (May 2020) § B.3.3.]

2. the component or apparatus has no substantial non-infringing use;
3. the component or apparatus constitutes a material part of the invention;
4. ecobee [was aware] [knew] of the asserted patents and knew that the [products or processes for which the] component or apparatus [has no other substantial] [was especially made or adapted for] use [may be covered by a claim] [as an infringement] of the [asserted patents] [Asserted Claim]; and
5. [that] [ecobee's customers] use [the component, material, or apparatus to] directly [infringes the claim] [infringe an Asserted Claim].

[ecobee's culpability is measured against its knowledge and intent at the time of its conduct. The mere knowledge of possible infringement by others does not amount to contributory infringement. Rather, the Plaintiff, Ollnova, must prove that the Defendant, ecobee, knew that the products infringed a claim of the asserted patents or subjectively believed there was a high probability that they infringed a claim of the asserted patents and took deliberate actions to avoid confirming this belief.]

[When considering whether ecobee knew that the products infringe a claim of the asserted patents or believed there was a high probability that the products infringe a claim of the asserted patents and deliberately avoided confirming that belief, you should consider the totality of the circumstances, including whether ecobee relied on the advice of a competent lawyer.]

In order to prove contributory infringement, Ollnova must prove that each of the above requirements is met. This proof of each requirement must be by a preponderance of the evidence, that is, more likely than not that each of the above requirements is met.

23. [21.] [IN] VALIDITY

I will now instruct you on the rules that you must follow in deciding whether or not ecobee has proven by clear and convincing evidence that claims 1, 3, 6, and 21 of the '282 patent, claims 1, 11, 12, 20, and 21 of the '887 patent, claims 1 and 2 of the '495 patent, and claims 1, 4, 5, 17, and 19 of the '371 patent are invalid.

An issued United States patent is accorded a presumption of validity based on the presumption that the United States Patent and Trademark Office, which you have heard referred to throughout this trial as the PTO or sometimes just the Patent Office, acted correctly in issuing the patent. This presumption of validity extends to all United States patents that are issued by the PTO. In order to overcome this presumption, ecobee must establish by clear and convincing evidence that the Asserted Claims of the Asserted Patents are not valid.

[The fact that the PTO grants a patent does not necessarily mean that any invention claimed in the patent, in fact, deserves the protection of a patent. For example, the PTO may not have had available to it all other prior art that will be presented to you. In addition, there is the possibility that mistakes were made or that information was overlooked. Examiners have a lot of work to do and no process is perfect. Also, unlike a court proceeding, patent prosecution takes place without input from those who are later alleged to infringe the patent.]⁵⁴

The time it took the United States Patent and Trademark Office to examine and grant the patents-in-suit is not relevant to any issue in this case. Even though the PTO examiner has allowed the claims of a patent, you have the ultimate responsibility for deciding whether the claims of the patent are invalid.

⁵⁴ [The Federal Circuit Bar Association Model Patent Jury Instructions (May 2020) § A.1.]

Like infringement, invalidity is determined on a claim-by-claim basis. Claims are construed in the same way for determining infringement as for determining invalidity. You must apply the claim language consistently and in the same manner for issues of infringement and for issues of invalidity. You must determine separately for each claim whether that claim is invalid.

I will now instruct you on how to decide whether or not ecobee has proven that the claims are invalid.

24. [22.] PRIOR ART

Now, at times, you will hear me make references to the prior art. In patent law, a system, device, method, publication, or patent that predated the patent claim at issue is called prior art. For a prior art reference to be considered for the purposes of determining whether or not the claims are invalid, the prior art item or reference must have been made, known, used, filed, or published more than a year before the effective date of the patent, which you have heard referred to at times as the priority date.

[In order for someone to be entitled to a patent, the invention must actually be “new” and not obvious over the prior art.]

ecobee has identified the following prior art to the '282 patent:

- U.S. Patent App. Pub. No. 2004/0008651 (“Ahmed”)
- U.S. Patent App. Pub. No. 2006/0028997 (“McFarland”)
- U.S. Patent App. Pub. No. 2005/0275530 (“Kates”)
- U.S. Patent App. Pub. No. 2005/0017873 (“Liu”)

ecobee has identified the following prior art to the '887 patent:

- U.S. Patent App. Pub. No. 2005/0275530 (“Kates”)
- U.S. Patent App. Pub. No. 2006/0152335 (“Helgeson”)

- U.S. Patent App. Pub. No. 2003/0137968 (“Lareau”)

ecobee has identified the following prior art to the ’495 patent:

- U.S. Patent No. 8,984,500 (“Mesarina”)
- U.S. Patent App. Pub. No. 2003/0151513 (“Herrmann”)
- U.S. Patent App. Pub. No. 2004/0122930 (“Pasternak”)
- U.S. Patent App. Pub. No. 2004/0008651 (“Ahmed”)

ecobee has identified the following prior art to the ’371 patent:

- U.S. Patent App. Pub. No. 2005/0275530 (“Kates”)
- U.S. Patent App. Pub. No. 2006/0152335 (“Helgeson”)
- U.S. Patent App. Pub. No. 2004/0100394 (“Hitt”)⁵⁵

25. [24.] ANTICIPATION⁵⁶

In order for someone to be entitled to a patent, the invention must actually be “new.” [In general, inventions are new when the same apparatus, system, or method has not been invented, used and/or disclosed before.] ecobee contends that [the asserted] claims [1 and 6 of the ’282 patent, claims 1, 11, 12, 20, and 21 of the ’887 patent, claim 1 of the ’495 patent, and claims 1, 4, 5, 17, and 19 of the ’371 patent] are invalid because [they] [the claim inventions] were anticipated by prior art[.] [or because Ollnova lost the right to obtain a patent.] ecobee bears the burden of proving anticipation by clear and convincing evidence. [ecobee also bears the burden of proving that the art it asserts qualifies as prior art, including that it is entitled to the priority date that ecobee

⁵⁵ [The Federal Circuit Bar Association Model Patent Jury Instructions (May 2020) § B.4.3a-1 (with modifications).]

⁵⁶ Federal Circuit Bar Association Model Patent Jury Instructions (May 2020) at § 4.3b-1 (modified).

alleges.]⁵⁷

If an invention has been previously invented and disclosed to the public, then it is not new, and therefore the claimed invention is “anticipated” by the prior invention. Simply put, the invention must be new to be entitled to patent protection under the U.S. patent laws. To anticipate a claim, each and every element in the claim must be present in a single item of prior art, and arranged or combined in the same way as recited in the claim. You may not combine two or more items of prior art to find anticipation. In addition, to anticipate, a single item of prior art must enable one of ordinary skill in the art to make the invention without undue experimentation. In determining whether every one of the elements of the claimed invention is found in the prior art, you should take into account what a person of ordinary skill in the art would have understood from his or her review of the particular piece of art.⁵⁸

Anticipation must be determined on a claim-by-claim basis. ecobee must prove by clear and convincing evidence that all of the requirements of a claim are present in a single piece of prior art.⁵⁹ [To anticipate the invention, the prior art does not have to use the same words as the claim, but all of the requirements of the claim must have been disclosed and arranged as in the claim. The claim requirements may either be disclosed expressly or inherently—that is, necessarily

⁵⁷ *Microsoft Corp. v. i4i Ltd. P’ship*, 564 U.S. 91, 95 (2011) (holding that § 282 requires an invalidity defense to be proved by clear and convincing evidence); *Allergan, Inc. v. Apotex Inc.*, 754 F.3d 952, 967 (Fed. Cir. 2014) (defendant bears burden to show asserted art is prior art to patents by clear and convincing evidence); 35 U.S.C. §282 (burden of establishing invalidity of a patent rests on party asserting invalidity).

⁵⁸ *Innovation Sciences, LLC v. Amazon.com, Inc.*, No. 4:18-cv-00474, Dkt. 845 at 19 (Final Jury Instructions) (E.D. Tex. Sept. 2, 2020).

⁵⁹ *Innovation Sciences, LLC v. Amazon.com, Inc.*, No. 4:18-cv-00474, Dkt. 845 at 19 (Final Jury Instructions) (E.D. Tex. Sept. 2, 2020).

implied—such that a person having ordinary skill in the art in the technology of the invention, looking at that one reference, could make and use the claimed invention. Anticipation can occur when the claimed invention inherently and necessarily results from practice of what is disclosed in a written reference, even if the inherent disclosure was unrecognized or unappreciated by one of ordinary skill in the field of the invention.⁶⁰]

[Keep in mind that ecobee may not establish anticipation by arguing that the accused products practice the prior art, or by comparing the accused products to a prior art reference.]⁶¹ An item of prior art may anticipate without explicitly disclosing a feature of the claimed invention if that missing characteristic is necessarily present or inherent in the single anticipating reference.

Where ecobee is relying on prior art that was not considered by the PTO during examination, you may consider whether that prior art is significantly different and more relevant than the prior art that the PTO did consider. If you decide it is different and more relevant, you may weigh that prior art more heavily when considering whether the challenger has carried its clear-and-convincing burden of proving invalidity.

If a dependent claim is anticipated by the prior art, then the claims from which it depends are necessarily anticipated as well. Conversely, if an independent claim is anticipated, its dependent claims, which have more limitations, may not be anticipated.

⁶⁰ [The Federal Circuit Bar Association Model Patent Jury Instructions (May 2020) § B.4.3b-1 (with modifications)]

⁶¹ *Bright Data, Ltd. v. Teso, Lt UAB, et al*, No. 2:19-cv-00395 (Final Jury Instructions at 44-45) (E.D. Tex. Nov. 5, 2021).

26. [25.] OBVIOUSNESS

ecobee contends in this case that some of the asserted claims of the asserted patents are invalid as being obvious. Even though an invention may not have been identically disclosed or described before it was made by the inventor, in order to be patentable, the invention also must not have been obvious to a person of ordinary skill in the field of technology of the patent at the time of the invention was made. ecobee [is required to] [may] establish that a patent claim is invalid by showing by clear and convincing evidence that the claimed invention would have been obvious to persons having ordinary skill in the art at the time the invention was made or the patent was filed in the field of the invention.

In determining whether a claimed invention is obvious, you must consider the level of ordinary skill in the field of the invention that someone would have had at the time the invention was made or the patent was filed, the scope and content of the prior art, and any differences between the prior art and the claimed invention.

Keep in mind that the existence of each and every element of the claimed invention in the prior art does not necessarily prove obviousness. Most, if not all, inventions rely on the building blocks of prior art. In considering whether a claimed invention is obvious, you may[, but are not required to, find obviousness only if you find that] [consider whether] at the time of the claimed invention [or the patent's filing date], there was a reason that would have prompted a person of ordinary skill in the field of the invention to [modify or] combine the known elements in a way that the claimed invention does, taking into account such factors as:

1. whether the claimed invention was merely the predictable result of using prior art elements according to their known function;

2. whether the claimed invention provides an obvious solution to a known problem in the relevant field;

3. whether the prior art teaches or suggests the desirability of combining elements in the claimed invention[, such as where there is a motivation to combine];

4. whether the prior art teaches away from combining elements in the claimed invention; [and]

5. whether it would have been obvious to try the combinations of elements in the claimed invention, such as where there is a design incentive or market pressure to solve a problem, and there are a finite number of identified predictable solutions[, although obvious to try is not sufficient in unpredictable technologies; and][⁶².]

6. [whether the change resulted more from design incentives or other market forces.]⁶³

To find the invention obvious, you must find that the prior art provided a reasonable expectation of success. In determining whether the claimed invention was obvious, consider each claim separately. [Do not use hindsight. In other words, you should not consider what a person of ordinary skill in the art would know now or what has been learned from the teaching of the asserted patents.]⁶⁴

[In making these assessments] [In determining whether the claimed invention is obvious], you should take into account any objective evidence, sometimes called secondary considerations,

⁶² [The Federal Circuit Bar Association Model Patent Jury Instructions (May 2020) § B.4.3c (with modifications).]

⁶³ *Optis Wireless Tech., LLC v. Apple Inc.*, No. 2:19-cv-0066-JRG, Trial Tr. at 983 (Jury Instructions at Close of Evidence) (E.D. Tex. Aug. 10, 2020).

⁶⁴ *Id.*

that [Ollnova may (but is not required to) present, and that] may shed light on [whether] [the obviousness or not of] the claimed invention [is obvious], such as:

1. whether the invention was commercially successful[;][as a result of the merits of the claimed invention (rather than the result of design needs or market-pressure, advertising, or similar activities);]
2. whether the invention satisfied a long-felt need in the art;
3. whether there was a failure of others to achieve the results of the invention;
4. whether others copied the invention;
5. [whether there were changes or related technologies or market needs contemporaneous with the claimed invention]
6. whether the invention achieved unexpected results;
7. whether others in the field praised the invention; and
8. whether the invention departed from other principles or accepted wisdom of the art.

Now, no one factor alone is dispositive, and you must consider the obviousness or non-obviousness of the claim as a whole. [These factors are relevant only if there is a connection or nexus between the factor and the asserted claims of the asserted patents.]⁶⁵ [In order for a secondary consideration to be present, Ollnova must demonstrate that there is a connection or nexus between the challenged claim and the objective evidence on which it intends to rely. For example, to qualify as objective evidence, commercial success must be attributable to the claimed invention itself, rather than to other factors such as market power, advertising, demand for all products of a given type, or a rising economy that helps all products.]

⁶⁵ *Optis Wireless Tech., LLC v. Apple Inc.*, No. 2:19-cv-0066-JRG, Trial Tr. at 984 (Jury Instructions at Close of Evidence) (E.D. Tex. Aug. 10, 2020).

To be clear, the listing of secondary considerations provided above is provided solely to indicate the type of evidence that may qualify as secondary considerations, and does not mean that any of the listed secondary considerations exist for any asserted claim. It is Ollnova's burden to demonstrate the presence of any such secondary considerations that may be considered when determining whether a claim is obvious.]

Even if you conclude that some of the above indicators have been established, those factors should be considered along with all other evidence in the case in determining whether ecobee has proven that the claimed invention would have been obvious.

In determining whether the claimed invention was obvious, consider each claim separately, but understand that if a dependent claim is obvious, then the claims from which it depends are necessarily obvious as well. Conversely, if an independent claim is obvious, its dependent claims, which have more limitations, may not be obvious.

27. [23.] PATENT INELIGIBILITY

[To succeed] [ecobee contends that the Asserted Claims of the '495 patent are invalid for failure to claim patent-eligible subject matter. In general, a patent may be obtained] on [its] [any new and useful process, machine, manufacture or composition of matter, or any new and useful improvement thereof. However, there are certain types of subject matter that are not eligible for patenting. These are laws of nature, natural phenomena, and abstract ideas.

There is a two-step process for determining whether patent] claims [for patent ineligibility, ecobee must show] [cover ineligible subject matter. Step one requires determining whether the claims are directed to an ineligible category of subject matter, such as an abstract idea. If that is the case, step two requires determining if the claims contain an "inventive concept" sufficient to transform the abstract idea into patent-eligible subject matter—in other words, an element or

combination of elements that is sufficient to ensure that the patent at issue amounts to significantly more than a patent upon the abstract idea itself.

I have already found in this case that ecobee proved] by clear and convincing evidence that the [elements of the asserted claims of the '495 patent] [Asserted Claims of the '495 patent are directed to an abstract idea. Specifically, I found that the Asserted Claims are directed to the abstract idea of “controlling generic ‘components’ using information from two separate sources (i.e., information from two separate networks).” However, I have not made a determination at step two as to whether those claims contain an inventive concept. That is a determination is for you to make, based on the following principles.

At step two, ecobee must demonstrate by clear and convincing evidence that the elements of the Asserted Claim,], when [taken] [considered] individually [or when taken] [and] as an ordered combination, involve only technology which a person of ordinary skill in the art would have considered to be well-understood, routine, and conventional as of [April 9, 2004] [the date of invention. In determining whether a patent claim involves well-understood, routine, and conventional technology to a person of ordinary skill in the art, you may consider statements made in the patent’s specification, as well as evidence of the prior art and evidence provide by witnesses].

[Whether a particular technology was well-understood, routine, and conventional goes beyond what was known in the prior art. The mere fact that something is disclosed in a piece of prior art does not mean that it was well-understood, routine, and conventional.

At the same time, the specification of the asserted patents may be such evidence, if you find that the specification shows that the elements of the asserted claims, when taken individually or when taken as an ordered combination, involve only technology which a person of ordinary

skill in the art would have considered well-understood, routine, and conventional.⁶⁶]

[An inventive concept may be found in an element or combination of elements that is recited in a claim, if that element or combination of elements has not been shown to be conventional. Use of conventional components in a conventional arrangement cannot supply an inventive concept.]

A claimed invention's use of an abstract concept to which it is directed cannot supply an inventive concept. Therefore, when considering whether the Asserted Claims disclose an inventive concept at step two sufficient to transform the abstract idea into a patent-eligible invention, you must consider what is in the claim beyond the abstract idea itself, which I have identified above.

An inventive concept may also be found in improvements to existing technology recited in the claims. However, in order to supply an inventive concept, the improvement must be present in the claim. If an improvement is described in the patent specification, but it is not reflected in the Asserted Claims, that improvement cannot supply an inventive concept for the Asserted Claims.

Patent eligibility is different from anticipation or obviousness, and involves different considerations. A patent may claim a new or non-obvious idea, but may still be found invalid for claiming subject matter that is not patent eligible. Therefore, a determination that a claim is not

⁶⁶ [Innovation Sciences, LLC v. Amazon.com, Inc., No. 4:18-cv-00474, Dkt. 845 at 22-23 (Final Jury Instructions) (E.D. Tex. Sept. 2, 2020).]

anticipated or obvious does not necessarily mean that the claim is patent eligible.^{67]}^{68,69}

28. [26.] PERSON WITH ORDINARY SKILL IN THE ART

Now, several times in my instructions, I have referred to a person of ordinary skill in the field of the invention. It is up to you to decide the level of ordinary skill in the field of the invention.

In deciding what the level of ordinary skill is, you should consider all of the evidence introduced at trial including [but not limited to]:

1. the levels of education and experience of the inventors or other persons working in the field;
2. the types of problems encountered in the field;
3. prior art solutions to those problems;
4. the rapidity with which innovations are made; and
5. the sophistication of the technology.

⁶⁷ [Ollnova Techs., Ltd. v. ecobee Techs., ULC, Case No. 2:22-cv-00072-JRG, Dkt. 63 at 13-15 (E.D. Tex. Sept. 21, 2022); Alice Corp. v. CLS Bank Int'l, 573 U.S. 208 (2014); Two-Way Media Ltd. v. Comcast Cable Commc'ns, LLC, 874 F.3d 1329, 1337 (Fed. Cir. 2017); Am. Axle & Mfg., Inc. v. Neapco Holdings, LLC, 967 F.3d 1285, 1293 (Fed. Cir. 2020); RecogniCorp, LLC v. Nintendo Co., Ltd., 855 F.3d 1322 (Fed. Cir. 2017); Synopsys, Inc. v. Mentor Graphics Corp., 839 F.3d 1138, 1149, 1151 (Fed. Cir. 2016); Affinity Labs. of Texas, LLC v. DIRECTV, LLC, 838 F.3d 1253, 1263, n.3 (Fed. Cir. 2016); In re TLI Commc'ns LLC Pat. Litig., 823 F.3d 607, 611 (Fed. Cir. 2016); Automated Tracking Solutions, LLC v. The Coca-Cola Co., 723 F. App'x 989, 995 (Fed. Cir. Feb. 16, 2018); Intellectual Ventures I LLC v. Symantec Corp., 838 F.3d 1307, 1316 (Fed. Cir. 2016); BASCOM Glob. Internet Servs., Inc. v. AT&T Mobility LLC, 827 F.3d 1341 (Fed. Cir. 2016); Amdocs (Israel) Ltd. v. Openet Telecom, Inc., 841 F.3d 1288, 1302 (Fed. Cir. 2016).]

⁶⁸ **Ollnova's Objection:** ecobee's additional proposed discussion of § 101 law is cumbersome, confusing, and places undue explanation on this single defense, which may give the jury the impression that it is more significant or important to focus on than other issues in the case. Further, the discussion of the Court's prior ruling is contrary to the Court's standing order on motions in limine and suggests that the Court has an opinion on the validity of the patent.

⁶⁹ **ecobee's Objection:** Ollnova's limited language fails to provide a sufficient framework for the jury to properly determine the question of eligibility at Step Two. Further, the Court's prior finding is important to ensure that the jury does not improperly reconsider the law of the case, or confuse its limited role in view of the complete test for eligibility.

A person of ordinary skill in the art is a hypothetical person who is presumed to be aware of all of the relevant prior art at the time of the claimed invention.

29. [27.] DAMAGES [- INTRODUCTION]

If you find that ecobee has not infringed any [of the asserted claims or that all of the infringed claims are invalid, then Ollnova is not entitled to any damages.] [asserted claim of the Asserted Patents, then Ollnova is not entitled to any damages, and you should not consider the amount of damages to award to Ollnova. If you find that ecobee has infringed any asserted claim of the Asserted Patents, and you further find that any infringed claim is invalid, then Ollnova is not entitled to any damages, and you should not consider the amount of damages to award to Ollnova.]

If you find that Ollnova has proven [by a preponderance of the evidence] that ecobee has infringed any [valid asserted claim] of the [asserted claims] [Asserted Patents], you must then consider the proper amount of damages, if any, to award to Ollnova [for that infringement].

I will now instruct you about the measure of damages. However, by instructing you on damages, I am not suggesting which party should win this case on any issue.

[The damages you award must be adequate to compensate Ollnova for the infringement you find. Damages are not meant to punish an infringer.⁷⁰ Your damages award, if you reach this issue, should put Ollnova in approximately the same financial position that it would have been in had the infringement not occurred.]^{71,72}

⁷⁰ **Ollnova's Objection:** The caution against awarding punitive damages is duplicative of the unobjected instruction in the following paragraph.

⁷¹ The Federal Circuit Bar Association Model Patent Jury Instructions (May 2020) § A.4 (with modifications); *EcoFactor Inc. v. ecobee Inc.*, No. 6:21-cv-00428-ADA, Dkt. 241 at 27 (W.D. Tex.).

⁷² **Ollnova's Objection:** This instruction is contrary to 35 U.S.C. § 284, which focuses on "a reasonable royalty for the use made of the invention by the infringer."

If you award damages, they should take the form of what two reasonable people would have negotiated in. When I say two reasonable people here, I am referring to a negotiation between the patent holder and the alleged infringer. Ollnova has the burden to establish the amount of its damages by a preponderance of the evidence. In other words, you should award only [the amount] [those damages] that Ollnova establishes it is more likely than not [that those two reasonable people would have negotiated] [has suffered]. Now, while Ollnova is not required to prove the amount of its damages with mathematical precision, it must prove them with reasonable certainty. [Ollnova is] [You may] not [award] [entitled to] damages that are [remote or] speculative[, damages that are only possible, or damages that are based on guesswork]. You must not award Ollnova more damages than are adequate to compensate for the infringement, nor should you award any damages for the purpose of punishing ecobee or setting an example. [The patent laws specifically provide that] [I will give more detailed instructions regarding] damages [shortly.] [for]

[During the trial, both Ollnova and ecobee presented testimony and evidence concerning the amount of damages, if any, that Ollnova should be awarded should you find that it has proven by a preponderance of the evidence that ecobee has infringed any valid asserted claim. You should not understand ecobee's presentation of testimony and evidence concerning damages to be an admission or evidence of any]⁷³ infringement [may not be less than a reasonable royalty]. [Defendants often present rebuttal testimony and evidence on the issue of damages for your consideration, solely in the event that you find infringement of any valid asserted claim. To be

⁷³ **Ollnova's Objection:** This instruction is cumulative of the introduction regarding the applicability of damages instructions, and thus unduly emphasizes a finding of no liability.

clear, ecobee contends that it does not infringe any asserted claim, and that no damages should be awarded to Ollnova.]⁷⁴

[A. Reasonable Royalty] [28. REASONABLE ROYALTY]

In this case, Ollnova seeks what it contends is a reasonable royalty. A royalty is a payment made to the patentholder in exchange for the right to make, use, or sell the claimed invention. [You must be careful to ensure that the award is no more and no less than the value of the patented invention.]⁷⁵ A reasonable royalty is the amount of royalty payment that the patentholder and the infringer would have agreed to in a hypothetical negotiation taking place at a time⁷⁶ prior to or when the infringement began.⁷⁷ This is called a “hypothetical negotiation” because we need to put ourselves back in the shoes of the two reasonable [people] [parties] figuring out what the right royalty would be. In considering this hypothetical negotiation, you should focus on what the expectations of the [two reasonable people] [patent holder and the alleged infringer] would have been had they entered into an agreement at that time and had they acted reasonably in their negotiations. In determining this, you must assume that both reasonable [people] [parties] believed that the asserted claims were infringed and not invalid and that both reasonable [people were] [parties were] willing to enter into an agreement. The reasonable royalty that you determine must

⁷⁴ **Ollnova’s Objection:** This instruction is cumulative of the introduction regarding the applicability of damages instructions, and thus unduly emphasizes a finding of no liability.

⁷⁵ **Ollnova’s Objection:** This instruction is contrary to 35 U.S.C. § 284, which focuses on “a reasonable royalty for the use made of the invention by the infringer.”

⁷⁶ *Riles v. Shell Expl. & Prod. Co.*, 298 F.3d 1302, 1311 (Fed. Cir. 2002) (“A “reasonable royalty” contemplates a hypothetical negotiation between the patentee and the infringer at a time before the infringement began.”).

⁷⁷ *Versata Software, Inc. v. SAP Am., Inc.*, 717 F.3d 1255, 1267 (Fed. Cir. 2013) (“The hypothetical negotiation seeks to determine the terms of the license agreement the parties would have reached had they negotiated at arms length when infringement began.”).

be a royalty that would have resulted from the hypothetical negotiation [between two reasonable people] [,] and not simply a royalty that either party would have preferred.

Evidence of things that happened after the infringement first began may be considered in evaluating the reasonable royalty only to the extent that the evidence aids in assessing what royalty would have resulted from the hypothetical negotiation.

[29. DAMAGES – LUMP SUM VS. RUNNING ROYALTY⁷⁸]

[If you award damages, you must make two determinations regarding a] [A] reasonable royalty[: (1)][can be paid either in] the form of [the royalty, and (2)] [a one-time lump sum payment or as a “running royalty.” Either method is designed to compensate the patent holder based on] the [amount] [infringer’s use] of the [royalty. Reasonable royalty awards can take the form of a lump sum, freedom to operate, royalty. In a lump sum, freedom to operate, royalty, the licensee must pay a single price up front; in exchange, the licensee is granted a license to use the] patented technology[.] [for the remainder of the patent term without any worry about additional disputes with the patent holder.] [It is up to you, based on the evidence, to decide what type of royalty, if any, is appropriate in this case.]

The lump sum payment is the amount that the [licensee company] [alleged infringer] would have paid at the time of a hypothetical negotiation for a license covering past and future sales[.] [through the life of the asserted patents. When a lump sum is paid, the infringer pays a single price for a license covering both past and future infringing sales.]

[Another form of royalty is called a “running royalty.” A running royalty is an ongoing royalty payment made by the licensee for each sale of the licensee’s products. For instance, the

⁷⁸ [The Federal Circuit Bar Association Model Patent Jury Instructions (May 2020) § B.5.7.]

licensee may pay the patent holder either a fixed amount or a percentage of each product it sells that incorporates the patented technology. In this case, you have heard evidence of the number of accused products sold through the present, and so a running royalty would cover only those products already sold and not to future products. If you determine that the form of the royalty is a running royalty, then any payment for future sales would be determined by the Court, not you. If you find that damages are due in this case, you must first decide whether the parties to the hypothetical negotiation would have agreed to a running royalty or a freedom to operate lump sum royalty.] [Reasonable royalty awards may also take the form of a running royalty based on the revenue from or the volume of sales of licensed products. A running royalty can be calculated, for example, by multiplying a royalty base by a royalty rate, or by multiplying the number of infringing products or product units sold by a royalty amount per unit.]

[30. REASONABLE ROYALTY – RELEVANT FACTORS⁷⁹]

In determining a reasonable royalty, you should consider all the facts known and available to the parties at the time the infringement began. [You should also consider the following:] [Some of the kinds of factors that you may consider in making your determination include:

1. The value that the claimed invention contributes to the accused product;
2. The value that factors other than the claimed invention contribute to the accused product; and
3. Comparable license agreements or other transactions, such as those covering the use of the claimed invention or similar technology.⁸⁰

⁷⁹ [The Federal Circuit Bar Association Model Patent Jury Instructions (May 2020) § B.5.8 (with modifications).]

⁸⁰ **Ollnova's Objection:** The separate enumeration of these three factors is cumulative of the *Georgia-Pacific* factors below and improperly emphasizes their importance over any others.

No one factor is dispositive and you can and should consider the evidence that has been presented to you in this case on each of these factors. You may also consider any other factors which in your mind would have increased or decreased the royalty the alleged infringer would have been willing to pay and the patent holder would have been willing to accept, acting as normally prudent business people. The so-called “*Georgia-Pacific*” factors, which can be considered to inform the hypothetical negotiations, include the following:]

1. The royalties received by the patentee for the licensing of the patents-in-suit proving or tending to prove an established royalty;
2. The rates paid by the licensee for the use of other patents comparable to the patents-in-suit;
3. The nature and scope of the license[,] as exclusive or non-exclusive[,] or as restricted or non-restricted in terms of territory or with respect to whom the manufactured products may be sold;
4. [Whether the patent owner had an] [The licensor’s] established policy [of granting licenses or retaining the patented] [and marketing program to maintain his or her patent monopoly by not licensing others to use the] invention [as its exclusive right] or [whether the patent owner had a policy of] [by] granting licenses under special conditions designed to preserve [its] [that] monopoly;
5. The commercial relationship between the licensor and the licensee, such as whether they are competitors in the same territory in the same line of business, or whether they are inventor and promoter;

6. The effect of selling the patented specialty in promoting sales of other products of the licensee, the existing value of the invention to the licensor as a generator of sales of his non-patented items, and the extent of such derivative or convoyed sales;

7. The duration of the patent and the term of the license;

8. The established profitability of the product made under [the] patent[s], its commercial success, and its current popularity attributable to the patent;

9. The utility and advantages of the patented invention over the old modes or devices, if any, that had been used for achieving similar results;

10. The nature of the patented invention, the character of the commercial embodiment of it as owned and produced by the licensor, and the benefits to those who have used the invention;

11. The extent to which the infringer has made use of the invention and any evidence probative of the value of that use;

12. The portion of the profit or of the selling price that may be customary in the particular business or in comparable business to allow for the use of the invention or analogous inventions;

13. The portion of the realizable profits that should be credited to the invention as distinguished from non-patented elements, the manufacturing process, business risks, or significant features or improvements added by the infringer;

14. The opinion and testimony of qualified experts; and

15. The amount that a licensor [(such as the patentee)] and a licensee [(such as the accused infringer)] would have agreed upon at the time the infringement began if both sides had been reasonably and voluntarily trying to reach an agreement; that is, the amount which a prudent licensee[—]who desired, as a business proposition, to obtain a license to manufacture and sell a

particular article embodying the patented invention[] would have been willing to pay as a royalty and yet be able to make a reasonable profit and which amount would have been acceptable to a prudent patentee who was willing to grant a license.

[You may have heard these factors referred to during the trial as the *Georgia-Pacific* factors. No one of these factors is dispositive, and you can and should consider the evidence that has been presented to you in this case on each of these factors. You can and you should consider the evidence that has been presented to you in this case on each of these factors. You may also consider any other factors which in your minds would have increased or decreased the royalty ecobee would have been willing to pay and that the patentee would have been willing to accept with both acting as normally prudent business people.]

As I have already told you, [You] [you] must not award the Plaintiff any additional amount for the purpose of punishing ecobee or setting an example.

[31. DAMAGES – NON-INFRINGEMENT SUBSTITUTES]

[Finally, in] [In] making a reasonable royalty determination, you may also consider evidence concerning the availability [and cost] [, or lack thereof,] of non-infringing [substitutes (or) alternatives[]] to the patented invention. [An acceptable substitute must be a product or method that does not infringe any Asserted Claim of the Asserted Patents.] You may compare the patented invention to non-infringing alternatives to determine the value of the patented invention, including the utility and advantages of the patent over the old modes or devices, if any, that had been used to achieve similar results.

[30. APPORTIONMENT] [32. DAMAGES – COMPARABLE AGREEMENTS⁸¹]

[The law requires] [Comparable license agreements are one factor] that [any] [may inform your decision as to the proper amount and form of the] reasonable royalty [award, similar] [that you find Ollnova has proved must correspond] to the [way in which the] value of [the patented inventions within the accused products.] [a house is determined relative to comparable houses sold in the same neighborhood.]

Whether a license agreement is comparable to the license under the hypothetical license scenario depends on many factors, such as whether they involve comparable technologies, comparable economic circumstances, comparable structure, and comparable scope. If there are differences between a license agreement and the hypothetical license, you must take those into account when you make your reasonable royalty determination.

The hypothetical license is deemed to be a voluntary agreement. When determining if a license agreement is comparable to the hypothetical license, you may consider whether the license agreement is between parties to a lawsuit and whether the license agreement was a settlement influenced by a desire to avoid further litigation]⁸²

33. DAMAGES – APPORTIONMENT⁸³

If you find that there was infringement of any valid asserted claim, the amount you determine as damages for that infringement must be based on the value attributable to the invention claimed in any such infringed Asserted Claim of the Asserted Patent,] as distinct from [other]

⁸¹ [The Federal Circuit Bar Association Model Patent Jury Instructions (May 2020) § B.5.9.]

⁸² **Ollnova's Objection:** This instruction conflicts with the Court's standing *limine* order to avoid discussion of litigation.

⁸³ The Federal Circuit Bar Association Model Patent Jury Instructions (May 2020) § B.5.12 (with modifications).

unpatented [features] [technologies in the Accused Products] or other [factors such as ecobee's marketing, advertising, brand strength, or] market [factors] [position]. This is particularly true where the accused product has multiple features[, technologies] and [multiple] components not covered by the patent or where the accused product works in conjunction with other non-patented items.

Any royalty that you find would have been agreed by the two reasonable [people I spoke of previously] [parties] must reflect the value attributable to the infringing features of the product, and no more. The process of separating the value of the allegedly infringing features from the value of all other features[, aspects, and technologies in the product] is called apportionment. Since the accused infringing products have both patented and unpatented features, [Ollnova] [your award determination] must [prove that any royalty is] [be] apportioned so that it is based only on the value of the [patented features] [portion of the Accused Products that practice the technology claimed in the Asserted Patents], and no more.⁸⁴

[In determining the appropriate royalty base and appropriate royalty rate, the ultimate combination of both the royalty rate and the royalty base must reflect the value attributable to the patented technology. In other words, the royalty base must be closely tied to the invention.

Therefore, the amount you find as damages must be based on the value attributable to the patented technology alone.]

[Apportionment can be addressed in a variety of ways, including by careful selection of a royalty amount to reflect the value added by the patented technology, by careful selection of a royalty base to reflect the value added by the patented technology, by adjustment of the royalty

⁸⁴ FCBA Model Patent Jury Instructions (May 200) § 5.12.

rate so as to account for the value of a product's non-patented technologies; or by a combination thereof. When the accused infringing products have both patented and unpatented technologies, your award must be apportioned so that it is based only on the value of the patented technologies, and no more. Put differently, the ultimate amount of damages must reflect the value attributable to the infringing technologies, and no more.⁸⁵

34. DAMAGES – DATE OF COMMENCEMENT OF DAMAGES⁸⁶

Damages commence on the date that ecobee has both infringed and been notified of the alleged infringement of the '282, '887, '495, and '371 patents (the "notice date"). Under the law, a patent holder may be able to obtain damages for a period beginning six (6) years prior to the filing of a Complaint, subject to certain conditions.

Here, the Parties agree that Ollnova first provided notice to ecobee of its alleged infringement of the Asserted Patents on March 21, 2022, which was the date that the Complaint in this lawsuit was served on ecobee.

The Parties further agree that, should ecobee be found to infringe method claim 21 of the '282 patent, method claims 17 or 19 of the '371 patent, or claims 1 or 2 of the '495 patent, and should those claims not be found invalid, then any damages resulting from infringement of such claims should begin no earlier than March 21, 2022.

For claims 1, 3, and 6 of the '282 patent, claims 1, 11, 12, 20, and 21 of the '887 patent, and claims 1, 4, and 5 of the '371 patent, you must determine when the damages (if any) began. Ollnova contends that damages should begin 6 years prior to the date that this lawsuit was filed:

⁸⁵ **Ollnova's Objection:** This instruction is inappropriate as it discusses apportionment methods not disclosed by either party's expert reports.

⁸⁶ [The Federal Circuit Bar Association Model Patent Jury Instructions (May 2020) § B.5.10 (with modifications); *Arctic Cat Inc. v. Bombardier Recreational Prods. Inc.*, 876 F.3d 1350 (Fed. Cir. 2017).]

March 8, 2016. ecobee contends that damages should begin no earlier than the notice date: March 21, 2022. This difference in dates is due to something called a “marking” requirement.

Under the law, a patent holder who makes or sells a patented article must mark the articles with the patent to recover damages prior to the notice date. “Marking” includes placing either the word “patent” or the abbreviation “pat.” with the patent’s number on substantially all of the products that include the patented invention. The marking requirement may also be satisfied by including with the product an internet address to a posting that associates the patented articles with the number of the applicable patents. The marking requirement applies to both the patent holder itself, and any licensees of the patent holder. If a patent holder or its licensees do not mark patented articles as required, the patent holder cannot recover damages before the notice date.

If an accused infringer identifies a product that it believes should have been marked with one or more patents, the accused infringer has the burden of identifying such product to the patent holder as a product that required marking. This is called a “burden of production.” It is a low bar, and it does not require, for example, evidence demonstrating that the identified product actually does practice any claim of a patent.

Once the accused infringer has identified a product that it believes should have been marked, the burden shifts to the patent holder to prove that it (or its licensees) satisfied the marking requirement, or, alternatively, that the unmarked product identified by the accused infringer does not fall within the patent claims. Ollnova, as the patent holder, has the burden of proving compliance with the marking requirement by a preponderance of the evidence.

If you find that ecobee has identified a product that it believes should have been marked with one or more patents, you must determine whether Ollnova has demonstrated, by a preponderance of the evidence, that such product was marked, or, alternatively, that the unmarked

product identified by ecobee does not fall within the claims of the patents that it is alleged to have practiced. If you find that Ollnova has met this burden for the '282, '887 and/or '371 patents, then for each patent for which you find such compliance, any damages should on March 8, 2016. If you find that Ollnova has not met this burden for the '282, '887 and/or '371 patents, then for each patent for which you find such non-compliance, any damages should on March 21, 2022.]⁸⁷

* * *

With those instructions, we are now ready to hear closing arguments from the attorneys in this case.

⁸⁷ **Ollnova's Objection:** The inclusion of a marking instruction is inappropriate until the Court has ruled on Ollnova's motion for summary judgment (Dkt. No. 127).

INSTRUCTIONS AFTER CLOSING ARGUMENTS⁸⁸

1. DELIBERATIONS

Ladies and gentlemen, I'd like to now give you a few final instructions before you retire to the jury room and begin your deliberations.

You must perform your duties as jurors without bias or prejudice as to any party. The law does not permit you to be controlled by sympathy, prejudice, or public opinion. All parties expect that you will carefully and impartially consider all the evidence, follow the law as it is now being given to you, and reach a just verdict, regardless of the consequences.

Answer each question in the verdict form from the facts as you find them to be, following the instructions that I have given you about the law. Again, do not decide who you think should win the case and then answer the questions accordingly. I remind you, your answers and your verdict in this case must be unanimous. You should consider and decide this case as a dispute between persons of equal standing in the community, of equal worth, and holding the same or similar stations in life. This is true in patent cases between corporations, partnerships, other business entities, and individuals. A patent owner is entitled to protect his or her rights under the laws of the United States, and that includes bringing a lawsuit in a United States District Court for money damages based on allegations of infringement.

The law recognizes no distinction among types of parties. All corporations, partnerships, other organizations, and individuals stand equal before the law, regardless of their size, regardless of who owns them, and they are to be treated by you as members of this jury equally.

⁸⁸ *Optis Wireless Tech., LLC v. Apple Inc.*, No. 2:19-cv-0066-JRG, Trial Tr. at 1058-1062 (Instructions After Closing Arguments) (E.D. Tex. Aug. 10, 2020).

Throughout this trial, I have given you instructions many times about not discussing anything about this case amongst yourselves. When you retire to the jury room in a few minutes, that is going to change. At that point, not only is it proper for you to discuss this case among yourselves, it becomes your duty to discuss this case among yourselves in an effort to reach unanimous decisions to the questions in the verdict form.

As I have told you, when you retire the jury room, you are each going to have your own printed copy of these jury instructions that I have given you. If during your deliberations, you desire to review any of the exhibits, not the demonstratives, but the exhibits which I have admitted into evidence, then you should advise me by a written note delivered to the Court Security Officer, who will bring it to me. And in that event, I will send that exhibit or those exhibits to you.

Once you retire, you should select your foreperson, and then conduct your deliberations.

If you recess during your deliberations, follow all the instructions I have given you about your conduct during the course of the trial.

After you have reached a unanimous verdict, your foreperson is to fill out the answers to those questions in the verdict form, reflecting your unanimous answers. You are not to reveal your answers until such time as you are discharged unless otherwise directed by me, and you are never to disclose to anyone, not even to me, your numerical division on any question.

Any notes that you have taken over the course of the trial are aids to your memory only. If your memory should differ from your notes, then rely on your memory and not your notes. The notes are not evidence and a juror who has not taken notes should rely on his or her own independent recollection and not be unduly influenced by the notes of other jurors. Notes are not entitled to any greater weight than the recollection or impression of each juror about the testimony.

If you want to communicate with me at any time during your deliberations, you should give a written message or question to the Court Security Officer signed by your foreperson. The Court Security Officer will then bring it to me. And I will respond to you as promptly as possible, although, I will tell you, it almost always takes me some time to respond. And I will respond to you either in writing or by having you brought back into the courtroom where I can address you orally. I will always first disclose to the attorneys in the case your question and my intended response before I answer any question you might send me.

After you have reached a verdict and I have discharged you from your duty as jurors in this case, I want you to understand you are not obligated to talk with anyone about your service in the case. But, at the same time, once I have discharged you, then you are free, if you choose to, to discuss your service in this case with anyone that you might like to. That choice will be yours and yours alone.

[2. SOCIAL MEDIA INSTRUCTION

During your deliberations, you must not communicate with or provide any information to anyone by any means about this case. You may not use any electronic device or media, such as the telephone, a cell phone, smartphone, tablet or computer, the Internet, any Internet service, any text or instant messaging service, any Internet chat room, blog social media platform or website such as Facebook, LinkedIn, YouTube, Snapchat, WhatsApp, Instagram, Twitter or TikTok to communicate to anyone any information about this case or to conduct any research about this case until I accept your verdict.

In other words, you cannot talk to anyone on the phone, correspond with anyone, or electronically communicate with anyone about this case. You can only discuss the case in the jury room with your fellow jurors during deliberations.]

I am now going to hand eight printed copies of these final jury instructions and one clean copy of the verdict form to the Court Security Officer to deliver to you in the jury room.

Ladies and Gentlemen of the Jury, you may now retire to the jury room to deliberate. We await your verdict.